

APRIL
1951



Marine Corps Gazette

APRIL 1951

CONTENTS

MESSAGE CENTER	2
KOREA AWARDS	16
LET'S TURN NIGHT INTO DAY <i>By LtCol Frederick S. Aldridge</i>	17
SOMETHING TO STOP A TANK <i>By Commodore Dudley W. Knox, USN, Ret'd</i>	20
THE RIFLE PLATOON COMMANDER <i>By 1stLt Paul D. LaFond</i>	24
IN BRIEF	32
GOING OVERSEAS? <i>By LtCol J. A. Donovan, Jr</i>	34
THE BRIDGE, PART I <i>By Col Rathvon McC. Tompkins</i>	36
THE CORPS' FILM ARCHIVES <i>By Cpl Lawrence M. Ashman</i>	48
AMPHIBIOUS GRADUATION PROBLEM	51
THE GENESIS OF FMF DOCTRINE: 1879-1899, PART I <i>By W. H. Russell</i>	52
"BOAR-R-RD" <i>By LtCol Charles L. Banks</i>	60
PASSING IN REVIEW	62

Opinions expressed in the Marine Corps GAZETTE do not necessarily reflect the attitude of the Navy Department nor that of Headquarters, United States Marine Corps.

THIS MONTH'S COVER: Epitomizing the spirit of the Marine Corps and the specialty for which the Corps is so well known today, the Marine on the cover might have landed on Tarawa, at Saipan, Peleliu, or even Inchon. He is on the cover, not as a mere decorative touch, but to call attention to a series of articles beginning on page 52 of this issue—The Genesis of FMF Doctrine: 1879-1899. He is the end product of a long evolutionary process.

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MARINE CORPS GAZETTE

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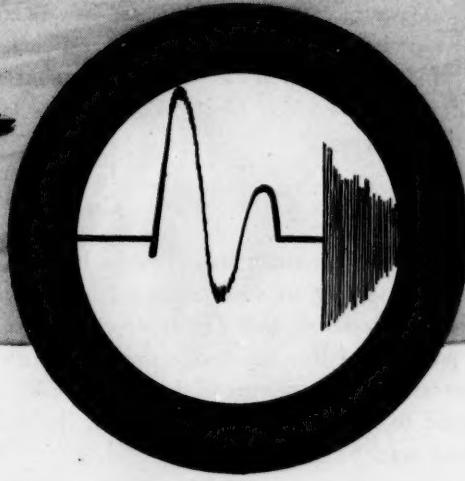
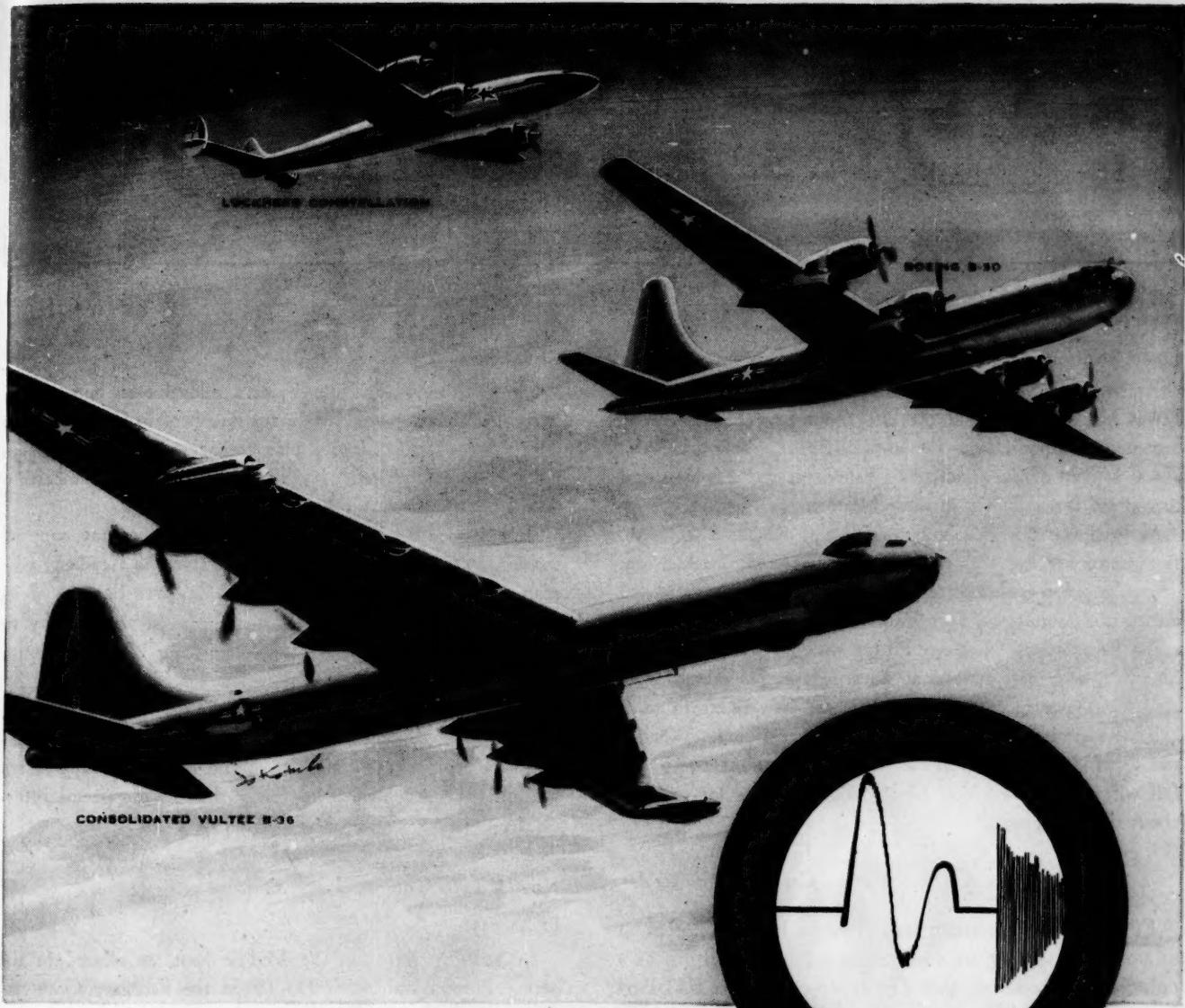
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THIS MONTH AND NEXT—With Chinese Communists going in strong for night attacks, LtCol Frederick S. Aldrich leads off in the April GAZETTE with a thought-provoking article, *Let's Turn Night Into Day*. The author suggests ways and means of providing illumination for night attacks and defense without giving the enemy benefit of your own light. New lieutenants will pick up a number of trooper-leading tips from the article, *Rifle Platoon Commander*.

In the May issue the GAZETTE will bring two more action stories from the 1st Marine Division in Korea. *Easy Alley* is an extremely interesting account of a night defensive action in the Chosin Reservoir area in which the Reds were routed. *Three Up and None Back* by Maj E. H. Simmons, former managing editor of the GAZETTE, proposes four rifle companies per battalion based on his Korean experiences.

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TO THE EDITOR

Message Center

Fort Fisher . . .

DEAR SIR:

Among your very attractive and instructive recent articles, I was much interested in the one about Fort Fisher, chiefly because my father-in-law—the late Col C. F. Williams, USMC—was in both of the assaults as a lieutenant and was brevetted to captain for gallantry in these assaults.

When I was first closely associated with RAdm S. B. Luce, founder of our Naval War College a year later, I asked him where he got the idea of the College. He said it crystallized during the assaults on Fort Fisher; that between the two assaults he was sent by Adm Porter with dispatches for Gen Sherman, who had arrived at Savannah in his march from Atlanta. After receiving the dispatches, Gen Sherman said:

"There's no need to keep hammering at Fisher. When I march to join Grant I will cut its communications and it will fall without a blow. You Navy fellows have a lot to learn about the art of war."

J. M. ELLICOTT,
Capt, USN, Ret'd

ED: Whether Sherman was right in his last statement or not is something we can't argue. It is something of a coincidence, however, that *The Genesis of the FMF*, Part I, on page 52 of this issue, discusses the early thinking of Navy and Marine officers of the post-Fort Fisher period in regard to doctrine and techniques in the field of amphibious war.

CORRECTION

On page 58 of the March GAZETTE Mr Charles Graves in *And St. David—Comrades In Arms* states that Marines and Royal Welch Fusiliers forced their way into Tientsin during the Boxer Rebellion "where they set free a future President of the United States, Mr Warren G. Harding."

Several sources quickly called attention to the fact that it was Mr Herbert Hoover and not Mr Harding. This is verified by Mr Hoover himself in his Memoirs recently carried in a national magazine.

The Editors

Membership . . .

DEAR SIR:

I am writing to find out if, as a midshipman here at the Naval Academy, I am eligible for membership in the Marine Corps Association. Since I plan to make the Marine Corps my goal on graduation, I feel the benefits from a membership would be many.

Each month I look forward to the arrival of my copy of the GAZETTE. Many other fellows here at the Academy who plan to enter other services read the GAZETTE because of its fine articles of general interest to anyone in the military or naval profession.

W. B. KELLY,
Mid'n 2/c USN

ED: Your present status in the naval service makes you eligible for membership in the Marine Corps Association. We are pleased to learn of the widespread interest in the GAZETTE at the Academy.

How Would You Do It? . . .

DEAR SIR:

Lt Stiles' problem in the Middle East, as related in the article *How Would You Do It?* in the February GAZETTE, demonstrates graphically that much more is demanded of a Marine officer than just book learning and school solutions. Unforeseen situations arise in peacetime duty and on the battlefield that require wit and action, or just plain horse sense.

Assigned to pick up a group of 200 cadets at a foreign military academy and take them aboard the U. S. Fleet on a tour, Lt Stiles was suddenly confronted with (1) a line of officers, all senior to him, standing at attention waiting for him to "inspect" them, and (2) the unexpected decision of the colonel commandant to accompany the cadets aboard ship.

There was no choice for Lt Stiles but to "carry on." (1) He permitted officers who outranked him to salute him first. (2) He kept the colonel commandant waiting ashore while he raced aboard ship to tip off the duty officer so that due honors could be arranged.

In matters like this, probably no two officers would have acted alike. This officer would have handled the situation this way:

(1) He would have kept his hand at salute as in passing in review the moment he noticed officers senior to him.

(2) On learning the colonel commandant was going to join



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the tour, he would have expressed great delight and then would have requested permission to send a cadet ahead with a message to the ship's officers to advise them of this signal honor so that he could be piped aboard with appropriate deference.

FRANK MALLEN,
LtCol, USMCR

ED: Although the GAZETTE has printed many *How Would You Do It?* articles in the past two years, we have received few comments on the solutions offered by the respective authors. We hope that your letter will stimulate others so that in the future we will be able to offer a variety of solutions to problems posed and answered.

FERRIGNO

The Editors of the Gazette blush with shame as we admit committing one of the cardinal sins of journalism—fouling up a name.

On pages 20 and 21 of the January issue the Gazette carried *A Letter From Korea* and attributed authorship of these fine tips for front line troops to MSgt William G. Feningno. The author's real name is MSgt William G. FERRIGNO. Our apologies to the author and his family.

PI's First Commander . . .

DEAR SIR:

In the December, 1950, GAZETTE, page 14, you state that Parris Island was set up 26 June 1891 under the command of 1st Lt Charles H. Lyman. This must be inaccurate as I remember that Gen Lyman's service commenced in the Spanish-American War as a member of the District of Columbia National Guard. I believe he was commissioned in the Marine Corps in 1900. He was only 15 years of age in 1891. Perhaps you are 10 years off in your date?

I enjoyed your splendid Anniversary Issue, as did many others in the 1st Marine Division.

JOHN A. WHITE,
Col, USMC

ED: In checking back, we have found that our research man was given some erroneous information. According to the Historical Division at Headquarters, U. S. Marine Corps, the first Marine Corps post on Parris Island was established on 26 June 1891, when a small detachment of Marines was posted there for duty in connection with the Naval Station. 1stSgt Richard Donovan was in charge of the Marine Detachment and Lt Charles H. Lyman, USN, was Commandant of the Naval Station.

NSLI . . .

DEAR SIR:

Reference is made to WO Furst's letter to the editor regarding MSgt Bois' article on National Service Life Insurance.

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I was serving overseas at the time MSgt Bois' article appeared in the GAZETTE and so unfortunately was unable to read it. However, I would like to clarify two points that WO Furst introduces in his letter.

First, an insured, while on a premium waiver status, may convert his term insurance to *only* ordinary life, 20 or 30 pay life. He may not convert to any of the endowment plans.

Second, term insurance does not have a cash value (an abbreviated expression for "cash surrender value"), but does have a small reserve (technically referred to as "conversion reserve"). This reserve is greatest in the third year of a five-year level premium policy, where it ranges from 10c at age 17 to \$7.04 at 59 per \$1,000 of insurance, and is zero at the end of the fifth year. This reserve is not available to the insured in the form of a cash surrender or loan value and is considered only in actuarial computations at the time of conversion to a permanent plan of insurance.

ROBERT E. SMITH,
CWO, USMCR

MOS Training . . .

DEAR SIR:

In reading the GAZETTE and recent letters from Headquarters Marine Corps, I have noticed that all emphasis seems to be on training the individual Marine for his job and to pass both GMST and technical tests.

I have often wondered why either the Marine Corps Institute, or Marine Corps Schools have not started courses of training in a specific MOS or functional fields. If special courses in a specific MOS were offered to all, the personnel who are temporarily performing duties which are not included in their MOS, would be better prepared to return to their original duties.

The MOS manual gives a brief job description for each MOS; why couldn't courses of study go along with the job title and number? The men who request the courses could also from time to time be mailed any changes and new procedures that occur.

In order to improve the proficiency of the individual it is believed that a course such as mentioned would be appreciated by all concerned.

ALVAH L. MATZ,
SSgt, USMC

Company Property . . .

DEAR SIR:

The subject matter of this letter was thought out last summer; however, a short trip to "The Land of the Morning Calm" interrupted the process of putting it in writing.

The above mentioned trip, and the preparation therefor, did much to strengthen my belief that the infantry company should be divorced from the arduous task of operating a large quartermaster agency.

Prior to embarkation last summer, each company in the regiment was bogged down with all the mechanics of operating a

large QM storeroom. Each battalion was also operating a large storeroom—a "middle man" in the "regiment-company chain." However, when the alert was sounded and we had to get equipment in a hurry we dispensed with the cumbersome SOP and used the system that I would like to see employed at all times. A system whereby all equipment, with the exception of crew-served weapons, be issued directly to the individual Marine from the *battalion* storeroom. This system not only saved time but very valuable personnel.

The present T/O allows for one (1) sergeant 3011 as Property NCO in each company, however during normal training periods, with constant turnover of personnel, each company has to have at least two responsible enlisted men employed as full time storeroom clerks and one officer assigned the primary duty of "Company Property Officer." The Company Commander also finds himself spending many hours away from his troops doing the necessary supervision, inventory, and inspections ,etc., that go with operating a large QM agency.

By putting all but crew-served weapons under the direct control of the Battalion Supply Officer and his staff you will be putting the responsibility and work where it belongs—on the shoulders of the competent, experienced, and interested quartermaster personnel. This innovation into the present system would allow the company to "move out" on their training program with the additional infantry personnel normally hidden in the storeroom counting canteen cups.

JOHN FINN, JR.,
Capt, USMC

Attending College . . .

DEAR SIR:

What is there about attending college which suddenly makes a man who was unable to rise over PFC in two years' service (peacetime) with the FMF so valuable as officer material to the Marine Corps that when the reserve is mobilized he is instructed to remain in school, even permitted to study what he pleases? This is not a rhetorical question, I would really like to know.

I am the man in question. After enrolling in college, following my discharge, I joined the PLC. Competition to enroll in this select group of future Marine Corps Reserve officers was tough. I was the sole applicant from this particular college. But it was during the two six-week, summer training periods that my latent talent for leadership was fully brought out. Although I never had the opportunity to lead a platoon, squad, or even a fire team, I did get to drill the platoon now and then, and, once, I successfully led a head detail.

Let's face it. PLC is the softest and easiest way to a reserve commission offered by any service. Any college student who can pass the physical, and can afford to give up part of two summer vacations can have a reserve commission. That is, if he can get his degree, and did you know that degree credits are given for a weird and wonderful variety of courses? It's not much of a feat to get through college, especially in



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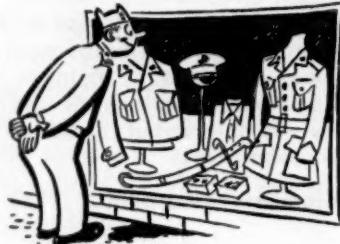
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these days of dwindling enrollments when academic standards must be lowered to keep enough cash-paying students on the campus to pay the faculty.

PLCs should be treated the same as other, mobilized reservists. Plenty of them were in college when they were called, too. If the PLC has anything on the ball, he'll show it. If he doesn't, that's tough on him, and saves the Marine Corps the expenses of commissioning him.

In *Newsweek*, January 29 issue, LtGen Eichelberger makes much of the fact that our big lack in Korea has been lack of combat know-how. LtCol McRae, in the February GAZETTE, notes that colleges do not seem to be turning out the type of inquiring minds that they should. So for Heaven's sake, why keep us in schools, which to a great extent are failing of their purpose, and why keep us from the battlefronts where we could be picking up the know-how in the only place that it is taught?

DAVID C. MACMICHAEL,
Sgt, USMCR

More on College . . .

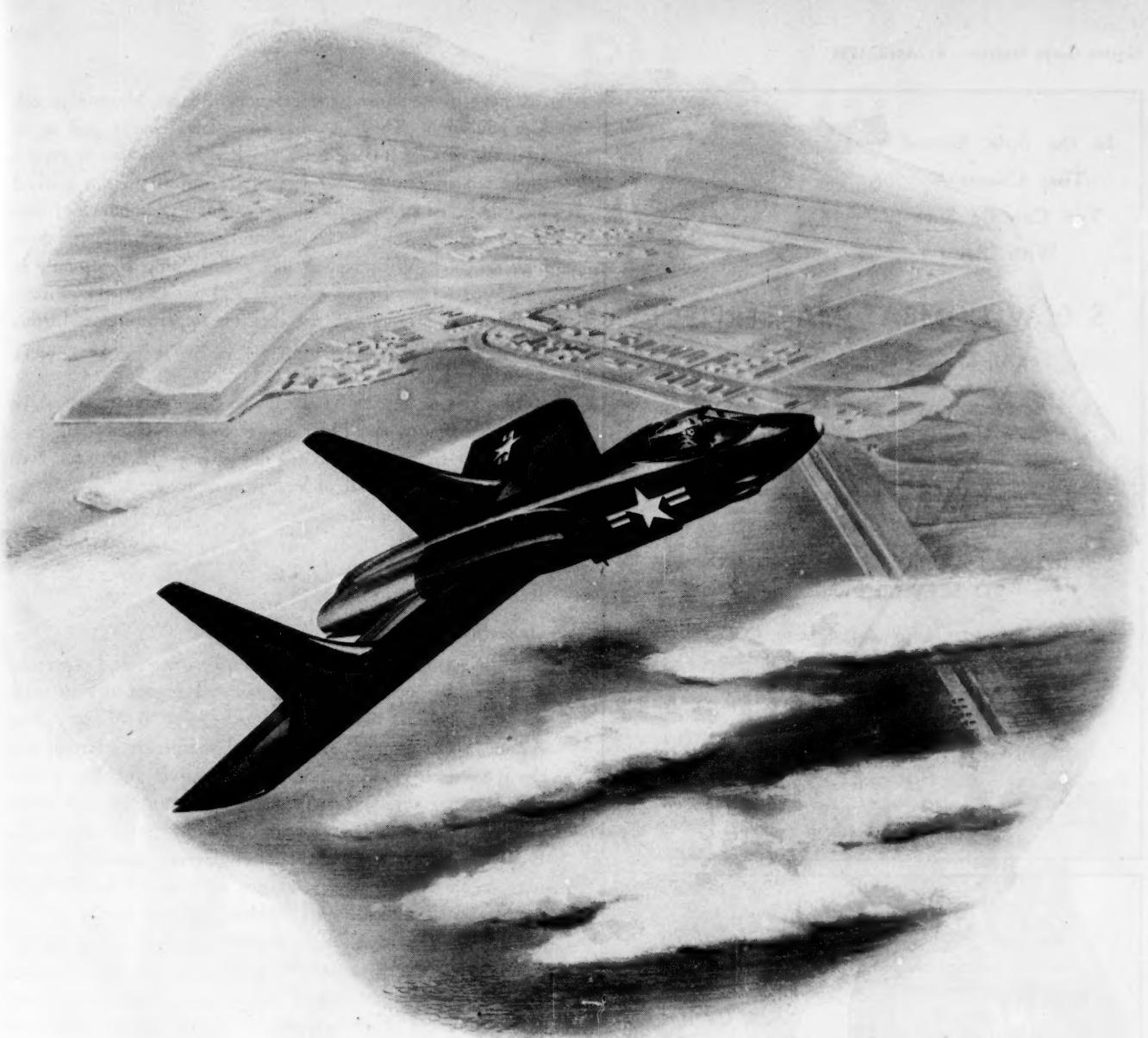
DEAR SIR:

There has been such a hue and cry recently about officers going to college while in the Marine Corps that I feel I must add my voice to the clamor before interest in the subject dies out.

I, like many others, deplore the fact that I was unable to benefit of higher education prior to joining the Marines. I enlisted in 1940 after graduating from high school and, until six months ago, have never been stationed where I could take advantage of night school, and such is the case of many a school-hungry officer. Six months ago I was transferred to the Norfolk area and I immediately enrolled at the College of William and Mary, Evening College. Happy day . . . I now have my first college credits. They come slowly this way, but it's worth it.

So much for my credits, but how about all the others that would give a right arm to be able to do the same. There are officers in this same area (and all over the country) who want to go to night school but feel that there are too many obstacles in their path. We, for instance, are stationed 32 driving miles from the college. If we get off work at normal quitting time (this seldom happens) we must dash home, change clothes, eat a bite or two, give the children a quick pat on the head, and drive to school hoping to be there before the first class starts.

The gist of my tirade is this: Why not a mutual aid policy from Headquarters on this subject? A well educated officer deserves the Marine Corps just as the Marine Corps deserves him. Give officers a chance to request duty stations that are located in the vicinity of an evening school for the expressed purpose of attending school, and give his request all practical consideration. Once he is enrolled try to let him off at the end of normal working hours . . . or even before, if necessary. Give him every possible break—the Marine Corps is benefitting from his efforts, too.



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I have often noticed the attitude of most Marines re college education. They see it as a shadowy elusive goal to be attained, or even pursued, by a select few. There is even a slight tendency to hold in awe those who attain this goal. I recently heard an old sergeant say "I got a good bunch of boys in my section. Why, hell! Some of 'em even graduated from high school." With feeling like that existing so strongly in the Corps we are letting ourselves and our Corps down if we don't take advantage of the slightest opportunity to further our educational standards. We are obligated to do something about it.

This idea of putting Marines, who desire to go to school, on their own time is not THE answer to the problem, but it's a step in the right direction. It's not a backward step, nor even will we be standing still, at least it is something.

A. C. MCLEAN,
1st Lt, USMC

100 Best Books . . .

DEAR SIR:

What a concentration of criticism, comment, and contradiction, must be pouring into your editorial dugout as your readers react to the article *100 Best Books For A Military Education*! I can fairly hear the pencil sharpeners whirring and the typewriters clicking from here to Florida and San Diego.

But as one who since retirement has continued as a hobby and a recreation his readings in "The Military, Naval, and Diplomatic History of the United States," and who prides himself upon the quality, but not the size, of his library I might as well add my minor calibre broadside to the rest.

First, at the risk of displaying my ignorance in the current Who's Who of leaders of Military-Naval education I would ask what is the background of my fellow lieutenant colonel that his dictum of what constitutes the *100 Best Books For A Military Education* be accepted without explanation or cavil? Evidently he is a member of the faculty of St. John's College but beyond that? (A footnote such as the editors of the *Proceedings of the Naval Institute* use giving the background of the author of each article has its points: certainly the reader is aided in evaluating the opinions expressed).

But more specifically why were only four volumes of Morrisons *History of United States Naval Operations in World War II* included? I have five and the sixth on order from the GAZETTE Bookshop. I do not accept the selection of four as among the "100 Best" to the exclusion of the others. (Incidentally had the title of the series as given above been used instead of those of the four chosen the author would have saved himself three titles for assignment elsewhere and his list remained up to date.)

Also since this list professes to be for general education Pratt's *Eleven Generals* and Freeman's *Lee's Lieutenants* in lieu of two of the biographies of individuals recommended would broaden the field covered.

I might note that of the 100 listed as *best* I am familiar with all except perhaps half a dozen, either owning them or

for 1 man . . .

or a Division . . .



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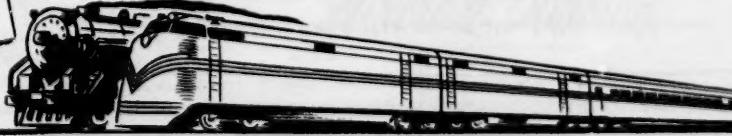
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through my access to the Redwood and Naval War College libraries, and my objection is not to this testimonial of their excellence, but to the status assigned to them to the exclusion of some others.

Also I wonder if a young officer on active duty really could *read* understandingly and *absorb* that list in five years. I recall that I made several trips through Clausewitz before I felt satisfied that I had grasped it fully and it was tough going.

HAROLD H. UTLEY,
LtCol, USMC, Ret'd

Another Book List . . .

DEAR SIR:

In the February GAZETTE LtCol Robert McRae, USA, very nicely points out the need for well planned professional reading habits among officers of the Armed Forces. His suggested list of worthwhile books is certainly impressive—almost discouraging. Actually, Marine officers are, by and large, avid readers who cover a wide scope of subjects. However in light of Col McRae's suggestions it would appear that our reading suffers not so much from neglect as from direction of effort.

It seems to me that the primary motivation for an officer planning his reading or study should be not only the desire to constantly broaden his base of general information—but the fact that a Marine officer always faces the proposition that the command or care of men in combat demands he devote much of his spare time to efforts making him more capable and worthy of the great responsibilities.

Thirst for professional knowledge should begin early in an officer's career; however, the junior officer learning his trade has little time for collateral reading if he is devoting proper efforts to studying the techniques of his job. Later, with experience and time in the service, the average officer can plan to read in the wider fields covered by Col McRae's list.

The young officer should read to prepare himself for the mental impact of the battlefield, for the realities of combat leadership, and for the practical management of men. These are things never well learned in schools—but can be realized to some extent in selected war books, both fiction and non-fiction. As years go by an officer should then attempt to cover a larger scope of writing in the military profession and thereby add more of the theories, experiences, and knowledge of the

Each month the GAZETTE pays five dollars for each letter printed. These pages are intended for comments and corrections on past articles and as a discussion center for pet theories, battle lessons, training expedients, and what have you. Correspondents are asked to keep their communications limited to 200 words or less. Signatures will be withheld if requested; however, the GAZETTE requires that the name and address of the sender accompany the letter as an evidence of good faith.

"great captains" to his own limited store.

The following "short" bookshelf is recommended to the officers who, in planning their reading, don't know at which end of Col McRae's list to start.

A basic list of reading for Marine officers:

Title	Author	Content
"Men Against Fire"	S. L. Marshall	Combat leadership
"Infantry in Battle"	Infantry School	Battle examples
"War As I Knew It"	Patton	Combat experiences and theory
"Company Commander"	MacDonald	Small unit combat
"Brave Company"	Wilson	Infantry combat
"Fix Bayonets"	Thomason	World War I Marines
"The Marines and Amphibious Warfare"	Isley and Crowl	History and analysis
"Front Line Intelligence"	Chandler and Robb	Practical intelligence
"Red Army Today"	Ely	A descriptive analysis
"Marines' War"	Pratt	Pacific war
"Devil Birds"	DeChant	Marine aviation in World War II
"Second World War"	J. F. C. Fuller	History
"Airborne Warfare"	Gavin	History and theory
"Infantry Attacks"	Rommel	World War I combat
"Men at War"	Hemingway	War stories
"On to Westward"	Sherrod	Marines in Central Pacific
"Stonewall Jackson"	Henderson	Civil War history and leadership
"Seven Pillars of Wisdom"	Lawrence	Leadership and desert war

When these are completed try some of the following:

Title	Author	Content
"Infantry Brigadier"	Kippenberger	New Zealand infantry
"Strategic Air Power"	Posseny	Strategy and theory
"Crusade in Europe"	Eisenhower	History
"The War Reports"	Marshall, King, Arnold	JCS reports
"German Generals Talk"	Liddell-Hart	Critique of Allies
"Makers of Modern Strategy"	Earle	History
"Military Staff"	Hittle	History and development
"Modern Arms and Free Men"	Bush	New weapons
"Intelligence Is for Commanders"	Davidson, Glass	Practical intelligence
"Armored Warfare"	J. F. C. Fuller	Tactics and theory
"Disaster Thru Air Power"	Andrews	Employment of air power
"Public Statements"	Marshall	Gen G. C. Marshall
"Their Finest Hour"	Churchill	World War II
"The Grand Alliance"	Churchill	World War II
"The Hinge of Fate"	Churchill	World War II
"Omaha Beachhead"		U. S. Army historical study
"Utah Beach to Cherbourg"		U. S. Army historical study
"On War"	Clausewitz	Strategy
"A Guide to Naval Strategy"	Brodie	Naval science

In addition to dipping into this small list of worthwhile books, each month the *Marine Corps GAZETTE*, the *Combat Forces Journal*, and the *Military Review*, from Ft Leavenworth, provide more good reasons why a Marine officer should never find time for a television set.

JAMES A. DONOVAN, JR.,
LtCol, USMC

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Joe and John . . .

DEAR SIR:

1stLt Charles Blyth's *On Cultivating Kernels and Colonels* appearing in the March GAZETTE is, as the lieutenant says, food for thought. From such nourishment comes a little saga:

Once there were two first lieutenants, Joe and John.

Joe was a company commander and a good one. His company grumbled some because they thought that they were worked harder than the other companies; but they did not really mind, because they knew that they were the best company in the outfit and that they were not working as hard or as long as their company commander.

Joe coached the basketball team. The basketball team, by long hours of practice, got to be so good that they traveled all over the country-side winning games. After the regular season they took part in the regional finals.

John was the post exchange officer. He had a good steward. One day he called in his steward and said:

"Sergeant, the Marine Corps Manual says that a post exchange officer shall have trust and confidence in his steward. I have trust and confidence in you, and I want you to run this exchange so that I do not have to waste too much time on it. I'll be very busy memorizing certain portions of a lot of books so that I get a high mark on my promotion exams. The Blyth Plan requires that my mark must be among the top ten per cent if I want to amount to anything."

Joe and John took their promotion exams. Joe was in the seventh ten per cent and John was in the top ten per cent.

The Colonel sent for Joe and said,

"Joe, John is being given an accelerated promotion to captain. Since yours is the only company that is not already commanded by a captain, I'm going to have to give it to John. You have made it the best company in the outfit, but in view of John's demonstrated superiority, there is nothing else I can do. You will be post exchange officer, Joe."

E. O. PRICE,
Col, USMC

Para-military . . .

DEAR SIR:

I believe this comes under the "Infatuated with the Sound of One Word Department." In the article *Para-Military Warfare* by LtCol Kintner, USA, in the March issue, the word *para-military* was used 24 times including in the title. The entire article is less than three pages long. It is included at least once in over half of the paragraphs, and three times in each of two paragraphs that are less than a hundred words long.

I can report the article had the desired effect on me, however, as I was not familiar with the word but after reading it repeatedly I looked it up in the dictionary.

R. D. WRIGHT,
LtCol, USMC

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2d, and 3rd), Capt Phillip C. DeLong (9th), 1stLt James C. Dunphy (3rd), Capt Richard F. Dyer (2d), Capt Howard J. Finn (17th), Capt Benjamin A. Fornonzini, Jr. (4th), Capt Charles D. Garber (2d), 1stLt Herbert Groff (6th), Capt Edward E. Hammerbeck (2d and 3rd), 1stLt John V. Hanes (1st and 2d).

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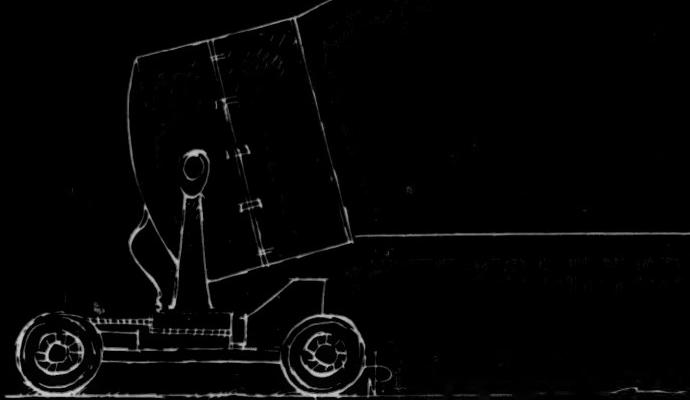
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LET'S TURN NIGHT INTO DAY



By LtCol Frederick S. Aldridge

"It would be easy to take that objective if the enemy wasn't staring down our throats. He can see everything we do."

Signed

1001 platoon leaders, company commanders, battalion commanders, regimental commanders, etc., from every front in every war.

* WE CAPTURE OUR OBJECTIVES QUICKER AND WITH less casualties when the enemy can't see us i.e. the NIGHT ATTACK.

The decision to attack at night gives the commander certain advantages:

1. He has the concealment of darkness.
2. He has the advantage of SURPRISE.
3. He has more protection from the newer weapons—VT fuse, tactical atomic bomb, etc.
4. He has gained hours of the 24 hour period that are normally lost to the attack commander.
5. His troops, if properly trained for night attack, are more valuable for night defense.

But, along with the advantages of the night attack come the disadvantages—these can be for the moment summed up as the "difficulties of control." The control problem normally is so great in the mind of the commander that he prefers a day attack rather than risk disorganization. A "hey diddle diddle, right through the middle" in the broad daylight will probably be the decision.

Why did the commander pick the hard way? Did the pitfalls of the night scare him? To expect a reasonable chance of success the commander knows that he must have a simple plan; must seek limited, readily definable

objectives; must have troops well trained in night operations; and above all, must insure that all echelons of command are instructed and oriented. If any of the above ingredients are missing the night attack becomes chaos.

There are both tactical and technical aids in retaining all important control. The use of infra-red light is merely a technical device that can help retain control. But infra-red notwithstanding, the best way to keep control and coordination on the battle fields at night is to let all our troops see what they are doing. And if at the same time we can prevent the enemy from seeing us—better yet.

The answer is light!

In the past the searchlight provided illumination for AA control. When radar came in, the searchlight went out. The T.O. for the AA gun battalion no longer contains the searchlight. This is logical—detection of the enemy is accomplished by a more efficient device.

Today there are pressing needs for the searchlight or high intensity light. We need to light up the battlefield. The hundreds of thousands of star shells and other illuminating flares have basically a defensive mission; the searchlight can play both a defensive and an offensive role *with emphasis in the attack*.

Here is a plan for the employment of night illumination that provides:

1. Indirect illumination of the general battlefield area—"artificial moonlight."
2. Direct illumination on unit objectives or on enemy installations.
3. Indirect illumination of rear areas to improve logistical control.

"Artificial moonlight" was used by the Allied forces

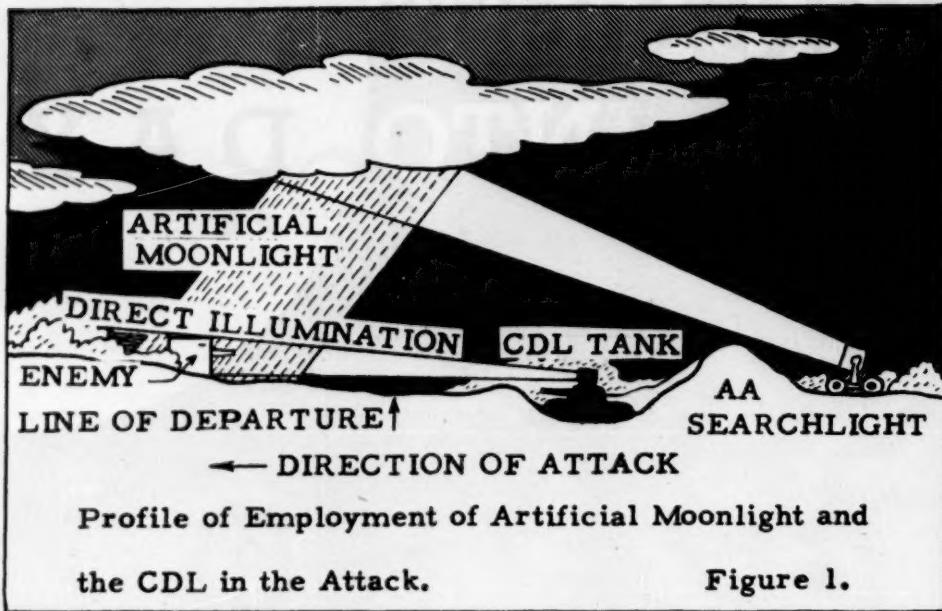


Figure 1.

during the last part of World War II with considerable success. Indirect illumination or "artificial moonlight" provides light on the battlefield area up to the approximate intensity of a full moon. The illumination used was then standard AA type of searchlight.

The searchlight should be emplaced for the attack in a defiladed position a considerable distance behind the front lines, directed toward the enemy, and elevated at a slight angle from the horizontal. The searchlight could be spaced at intervals behind the front in order to provide sufficient width to the illuminated area.

The principle of "artificial moonlight" is to direct the powerful beams of light above our installations and into the sky in the direction of the enemy. A certain percentage of this light is spilled down to the ground and thus provides indirect light. When clouds are in the sky the best effect is obtained.

This use of the searchlight should give the night attack what it often lacks—coordination and more speed. The commander will have control of the elements of his command. Up will go the morale of his troops who can now see well enough to move around and who cannot be seen until they have advanced to within assaulting distance. The shadows cast by the "artificial moonlight"

give an additional advantage to the troops using the illumination.

The solution to night fighting may be achieved if "artificial moonlight" is teamed with CDL. The CDL or canal defense light was an infantry support tank devised by the British during the last war to provide battlefield illuminations. The title CDL was nothing more than a code name adopted for security reasons. A powerful light projector was emplaced in tanks converted for the purpose, and the light was so protected by armor that it would take the direct hit

of a medium AT gun to knock it out.

JUST AS TANKS were never properly employed in mass in World War I, so the CDLs were left practically untried in World War II. Here is a weapon that can be another "tank." It is just the thing for an alert enemy to improve technically and tactically and then spring on us.

The CDLs could be placed in a hull defilade in the vicinity of the front lines. The positions selected should provide line of sight to the enemy installations or troops that we want illuminated and/or blinded. The powerful beam could be used to provide a constant or flickering light to dazzle the enemy. The light could also be used

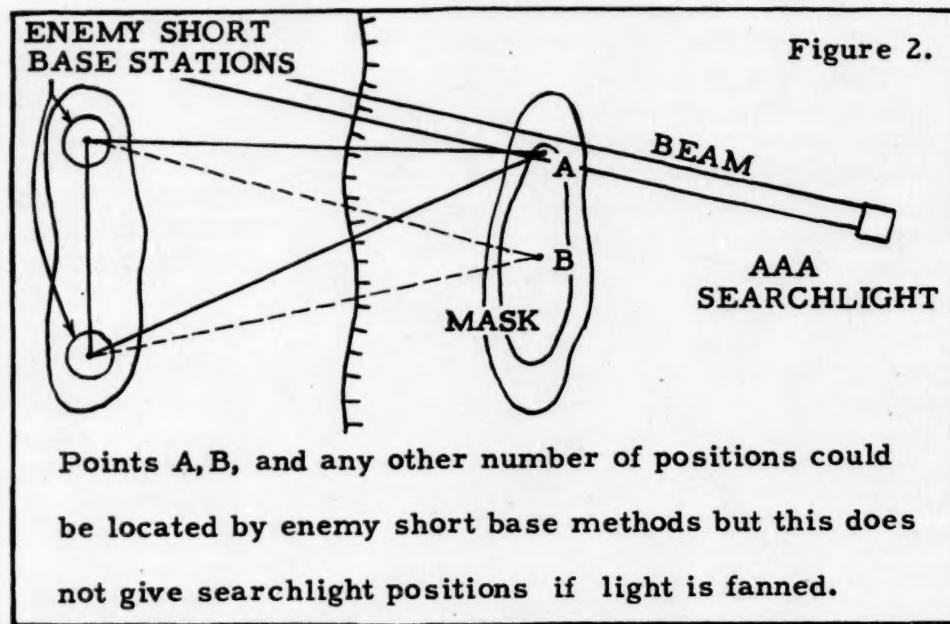


Figure 2.

to designate targets to a supporting arm such as air. The commander who has CDL and "artificial moonlight" is ready for the night attack. He has indirect illumination to control his troops. He has direct illumination to pinpoint the enemy in order to attack him with organic and supporting weapons. He has direct illumination to blind the enemy and thus lessen his capabilities for defense or for counterattack.

The third application of "artificial moonlight" concerns its employment in rear areas as an aid in reducing the night logistical problem. Properly sited the AA searchlight can provide enough light for traffic on the roads, unloading operations at the beach, improved control during ship-to-shore, etc.

The employment of the CDL and "artificial moonlight" as a team has infinite possibilities in the attack. The *light item is less* important in the defense only to the degree that the defense is less important in the American military credo than is the attack. Protected, directional illumination can guard weak flanks; cover the reorganization; illuminate and blind the enemy as he attacks, crosses rivers, or approaches from the sea.

As with any weapon, the tactics and employment of battlefield illumination will require development, decisions, and doctrine. Problems—technical, tactical, command, security, deception—must be solved. A few of these problems are suggested below.

1. Tactics. When siting the CDL and the "artificial moonlight" projector for both the offense and defense, consideration must be given to:

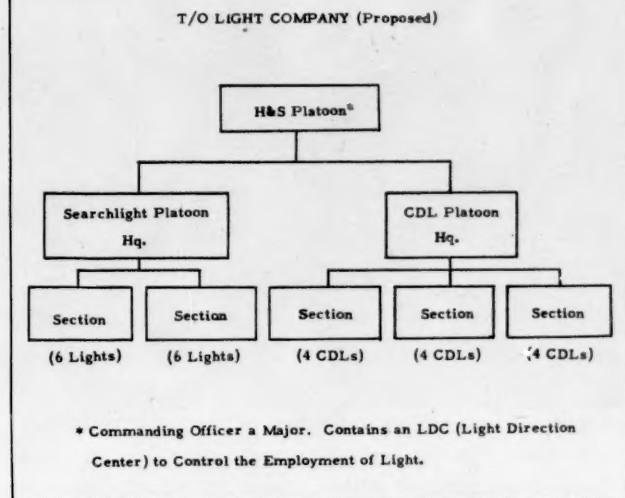
- A. Distance from front lines.
- B. Terrain profiles versus the illumination sites.
- C. Density of projectors in both depth and width.
- D. Distance to objectives and targets.
- E. Direction of attack versus direction of illumination.
- F. Clouds and weather.
- G. The need of having CDL and "artificial moonlight" supplement and not silhouette each other.

2. Technical. The night adaptability of our troops must not be lost while we are blinding the enemy.

3. Security. Defense against enemy artillery and raiding parties must be provided. The CDL's toughness and mobility are points of strength but its forward position is exposed to direct fire. It might appear that the "artificial moonlight" projector would be a sitting duck to artillery methods of target location (short base). Figure 2 shows that this is not the case, particularly if the beam is fanned back and forth.

4. Deception. Plans for deception will probably include the use of lights for demonstrations against enemy sectors not under attack; and for illumination of non-

Figure 3.



critical sectors of our rear areas in order to divert the attention of the enemy from logistical preparations for the attack.

5. Command. New problems of command and organization will arise with the employment of battlefield illumination. Should "the lights" be force troops or division troops? Should they be employed only after the receipt of corps permission due to the danger of "artificial moonlight" compromising the plans of the neighboring division? If the "lights" are put in the division T/O should they be division troops like the tank battalion; or should they be given to the artillery? The last suggestion is not as remote as it sounds. The artillery has large weapons that it wishes to remain concealed from the friendly lights; it has the know how of moving and controlling large ordnance; and most important it has communications.

6. Communication and Liaison. Turning the "lights" on and off, *when, where, and in what strength*, in order to support the plan of action of the infantry commander will be an art. It will require a communications and liaison setup only slightly less complicated than that of the artillery.

7. Training. After all the basic problems are solved; after the T/Os are written; and after the *light companies* and their equipment are in the field; then there must be unit training and combined training.

This cannot be done in a day. The entire process of combating the dark battlefield starts with procurement. The writer doesn't know just how many CDL tanks or AA searchlights we have in this country, but there are enough to make tests and to improve the designs. We must turn night into day—the enemy has already done so.

USMC



The best antitank weapon is another tank. But do we have time to build enough tanks to equal those of our prospective foe? Wouldn't it be easier and less expensive to develop land guns that would serve the same function? These are the questions that our author asks in an attempt to find an answer to the great tank force that our beachhead forces may someday have to engage

Something To Stop A Tank

By Commodore Dudley W. Knox, USN, Ret'd

CURRENT EXPERIENCE IN KOREA CONFIRMS A PRIMARY lesson of World War II. Infantry must have good tank support if it is to cope with tank-led troops. According to well qualified American and British experts, the support of artillery and air is not enough, and the best, if not the only satisfactory antitank weapon is another tank.

What then is to happen if the dreaded World War III materializes? The Russians are reputed to have upwards of 100,000 tanks already existing, and to be building 1,000 per month. This may be 10 times the corresponding figures for the democracies. Can we ever catch up with the Russians and have enough of our own tanks with which to beat theirs? Obviously, not for a good many years and at enormous cost. Meanwhile does it not seem imperative that we bend serious efforts towards developing something else besides tanks with which to stop tanks?

Prior to America's entry into the last war, German tanks ran rampant through Poland, Belgium, and France, revolutionizing the pattern of land warfare. They were the decisive element in spectacular victories giving Germany complete control of Western Europe. At this stage, the present writer advanced the theory to his valued friend, Maj Hoffman Nickerson, that, properly used, the gun was the answer to the tank; that shore artillery was not accurate against fast moving targets, because of unsuitable methods of fire control; that the naval system

of fire control should be adopted ashore in order to hit moving targets at long range.

Nickerson took my casually-made suggestions seriously. By his kind initiative, together we called on a colonel of high reputation who had just returned from Europe, where he had observed the new tank warfare. After several weeks of study the colonel decided against my proposals. His main reasons were that beyond 1,000 yards tanks were seldom good targets for artillery, and that at that distance, or less, the point-blank range made fire control unnecessary. My adventure in tank warfare seemed to be at an end!

However, some corroboration of my contentions came in July, 1943, when the Navy put ashore our assault on Sicily. This was of course accompanied by the customary support with naval guns after the troops had landed, and until they were well established. During the first two days the greatest menace to the beachhead at Gela was repeated attacks by some 60 German tanks, including those of the "tiger" variety. In repelling these, naval gunfire played the decisive role.

Naval fire control first proved its worth against tanks on 10 July, and at ranges from 10,000 down to 5,000 yards. The destroyer *Shubrick* had spent the hours of darkness in firing against shore batteries, and their searchlights, while doughboys poured ashore. At dawn, with other vessels, she came under the fire of shore batteries and was also subjected to a long series of air

attacks. Defensive measures, as usual, included maneuvering at high speed; that is, making frequent radical changes of course, such as circling and moving in figure-of-eight patterns. In addition, naturally, the ship was rolling and pitching. It was while subjected to such violent and irregular motion in several planes that the firing was done against rapidly moving tanks. How forsaken would the shore artillerist feel if the gun he was firing was so tossed about! What could he hit at a range of 10,000 yards, with the target also in rapid motion?

Soon after daylight, the *Shubrick's* shore fire control party reported a concentration of 25 tanks moving toward Gela, and called for indirect fire against these targets, invisible from the ship. Initially the range was close to 10,000 yards. After a few ranging shots, the destroyer opened with four-gun salvos from her five-inch guns. The procedure was to fire salvos rapidly (about 10 per minute) for several minutes; then pause for reports of error from the shore spotters; then several more minutes of rapid-fire salvos; then another pause for corrections, and so on. What was the result? Six or seven tanks ran the gauntlet to Gela, three were knocked out completely by hits, the other 15 were too damaged or too scared to continue in action. Thus about 70 per cent were put out of action. All this at ranges from 10,000 yards down to 5,000-6,000 using indirect fire, the target not being visible from the fast maneuvering ship.

During that and the succeeding day naval vessels broke up four more tank attacks on our troops in the Gela beachhead. They were credited with destroying 12 tanks in all. The cruiser *Boise* destroyed four "tigers" with

her six-inch guns. Her indirect fire at ranges up to 18,000 yards was reported by the shore fire control party as being very accurate and effective; when hit, a tank was "ripped apart," they said.

Now, a naval gun is not more accurate than an army gun. Equally, both of them are instruments of marvelous precision that can be counted on to hit what they are well aimed at, within incredibly small limits of error. For centuries shore artillery has been blessed with the simple problem of firing from a stationary position at a practically stationary target. The fire control solution is correspondingly simple. Naval fire control, on the other hand, from necessity has had to be very complicated. Two ships steaming at 35 knots directly towards each other have a rate of approach of over 80 miles per hour. Yet naval fire control methods can provide for this and keep guns hitting frequently at 30,000 yards range. Although tanks are much smaller targets, their speed in battle rarely exceeds 25 miles an hour. It should not be too difficult for a stationary shore gun to make a good score on a moving tank at 10,000 yards, and more, given a fire control system that will aim it accurately. Certainly a concentration of tanks could be hit often.

No other antitank weapon can compare with the gun in potential effectiveness. Aircraft, using bombs or rockets, hit a small target only with great difficulty, even at low altitudes. At moving targets their inaccuracy is greatly multiplied. Land mines are weapons of pure chance. Bazookas, flame-throwers, and similar devices for employment by foot soldiers are of such short range as to be useless except as a last resort when tanks have already





Our tanks have served well in an antitank role in Korea. The author maintains that our artillery, using different fire control methods, could knock out or disperse enemy tank formations long before they threatened our positions.

broken into front lines. The soldier is then at a critical disadvantage, since he must fight against the withering machinegun fire from behind the protection of armor. Tank formations should of course be stopped if possible long before they reach close quarters with our infantry. This is the task of artillery, primarily. Nothing else seems so well suited to it.

The writer is aware that the foregoing is out of harmony with the current concepts of American and British tank experts. A leader among them, Gen Devers, explains the accepted view in a recent interview of *U.S. News and World Reports* (21 July issue). The basic assumption therein is that "another tank" is the best and virtually the only certain means of stopping hostile tanks. The 25 August issue of the same journal carries an interview with the celebrated British authority, Gen J. F. C. Fuller. He too maintains that "The best antitank weapon is another tank." But, mark well that he adds "And tanks have to be supported with selfpropelled guns." Other experts have given emphasis to the need of artillery support as a secondary matter, but all seem to be unanimous in their advocacy of "another tank" as the main reliance against hostile tanks.

When the concept of stopping a tank with "another tank" is analyzed it boils down to a matter of artillery. The idea is that the "stopper" must have a powerful enough gun to penetrate hostile armor at about 2,000 yards, and kill the enemy with gunfire. That is a cardinal predicate; the basic element is tank design around which everything else must be built.

Since potentially hostile large tanks carry a heavy front plate of armor nearly 11 inches thick, we must mount at least a 76mm gun to pierce that plate. Our own tank will similarly have heavy front armor. But neither the enemy nor ourselves can afford to put heavy armor all the way around; sides, back, and top can have but light armor, otherwise the monster would be too heavy to move; and about 35 miles speed under favorable conditions is needed. All this for the 25-ton type of tank.

In general features the result is merely a gun surrounded by armor, mounted on a selfpropelled carriage, also armored. Performance in the way of loading and firing rapidly must be handicapped by restricted internal spaces. Although the gun itself is capable of great accuracy at ranges of 10,000 yards and more, it has been encumbered with heavy armor in order that it may be taken into battle ranges of 1,000 yards and less. Would it not be more logical to reduce the armor substantially and shoot from the longer ranges, and shoot faster? This of course assumes that a system of fire control will be used that takes fast moving targets into account as a cardinal consideration.

Tank specialists will object that long range fire will not be effective enough because the 76mm gun cannot penetrate 11 inches of armor at more than 2,000 yards. Such objection is not conclusive for several reasons. The weight saved from shedding armor can be put into a bigger gun, capable of sufficient penetration at long range. But even the light gun which hits often will kill by going through the thin parts; top, sides, and sections near the

ground. At long ranges the soft sides will often present a good target, since the attacker cannot always keep himself head-on when traveling through a long distance. Moreover, some of a group of laterally dispersed defending guns are bound to have a side for a target. Finally, there are several varieties of tanks that do not carry heavy armor.

My understanding is that the principles of naval fire control against moving targets have already been applied to the selfpropelled gun, which is thus prepared to serve as a tank "destroyer" at relatively long ranges. The rejection of such a gun as the best answer to the tank seems to be based on (1) the smallness of the target presented by an individual tank, and (2) the difficulty of seeing camouflaged tanks under many conditions of terrain.

Both of these objections admittedly have merit, especially as they apply to a small number of tanks. But our big problem is how to stem the onslaught of hundreds of thousands of tanks on the terrain of western Europe. Under such conditions the objections mentioned scarcely seem valid enough. At any rate the problem of overcoming them with guns should be far easier to solve than the alternative puzzle of how to create enough tanks on the European front in time to beat mainly with tanks the horde of enemy tanks. It seems to be clearly the part of wisdom for us to develop to the maximum the undoubtedly very great potentialities of the gun as a primary answer to the tank.

Granting the extreme accuracy of the gun itself, and assuming an excellent system of fire control to handle moving targets, there will remain the matter of spotting as the weakest link and the most difficult one to strengthen. A variety of novel devices, such as radar beacons, are already available to aid in the solution, and our amazing scientists no doubt are able to develop others, if set the task. There is also room for much improvement in the rapidity of fire of land artillery. This can be of great importance. Once shots are reported as hitting, a speed-up of shooting will be exceedingly profitable.

During the late war, the Navy had a tremendous amount of experience in bombarding shore targets. Much of it was against inland objects not visible from the ship and consequently needing expert spotting for effectiveness. Special attention was therefore given to the training of spotters and to their close integration with the gunnery elements of the task. We have seen how naval cruisers and destroyers broke up tank attacks at Gela, Sicily, in 1943. There was no luck or magic in this. It was a payoff of a long period of daily intensive drill prior to the operation. Each ship had its own shore fire control party with which the drills had been conducted. Provisions had also been made for spotting from airplanes, and the naval aviators similarly trained, but in the ensu-

ing battle the small ship's planes had no fighter protection and were soon driven down. They reported the tanks but could not keep the air long enough to spot gunfire against them.

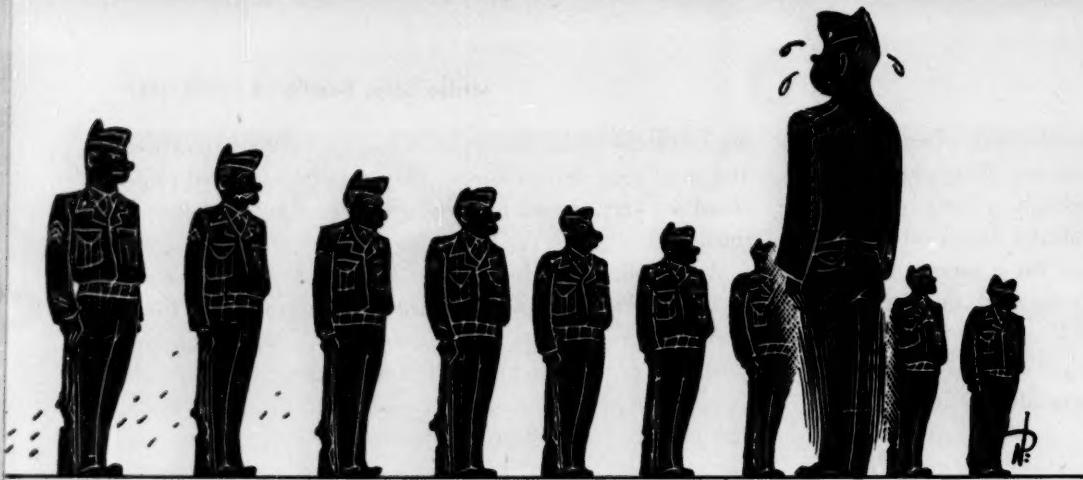
An excellent article, *Gunfire Support Lessons Learned in World War II*, Comdr McMillian, appears in the *Naval Institute Proceedings* for August, 1948. The high importance of thoroughly well trained ground-spotters is made clear. Upon many occasions, however, the shore fire control parties were unable to direct fire because of targets being out of their sight. It was then necessary to use airborne spotters. Therefore "a trained pool of aviators qualified to control the guns of fire support ships" was regularly maintained. McMillian points out that "These naval gunfire air spotters (*pilots*) must be trained to appreciate the ground forces' problem and to recognize front lines and profitable targets. They must also be trained to appreciate the problems of fire support ships, to be familiar with their ordnance and ammunition, and to understand and use the proper spotting procedure and method of conduct of fires."

The foregoing blazes the trail for the effective use of the selfpropelled gun against tanks in land warfare. In essence that trail is primarily one of integration of all the elements in the problem. The participating artillermen, tankmen, and airmen must be much more than merely "unified;" they must be integrated under a single control. That is the Navy and Marine Corps way and no other will work efficiently. Since artillery and tanks are both a part of the Army, the establishment of single control over those parts of the team should be simple. The essential integration of the Air Force component, however, seems to pose a special difficulty because of the recently won independence of the Air Force from the Army. The writer is not prepared to suggest a method of overcoming this organizational handicap.

But he is thoroughly convinced that it must be overcome if we are to be made ready to stop the overwhelming horde of Russian tanks. Selfpropelled guns can be made indispensable in doing this if all of the personnel connected with their use are integrated into one team, under single command both for training and operations. It seems futile to consider the alternative of relying primarily upon our own tanks to stem the Russian tide. How can we expect to get enough tanks in the field in time, even if the national economy could bear the burden?

Naturally, the selfpropelled gun, even when fully integrated with ground and air spotting, should not be relied upon alone. It will need to be supported by and co-ordinated with antitank efforts by our own tanks, as well as by and with our own combat planes. The galaxy of all these must again be well integrated for the maximum results. "Unification" is not enough.

USMC



The Rifle Platoon Commander

By 1st Lt Paul D. LaFond

"THE PLATOON COMMANDER IS RESPONSIBLE FOR the training, discipline, control, and tactical employment of his platoon." With these words, Field Manual 7-10, in the language common to military manuals, sums up the duties of the man in charge of the rifle platoon.

The embryo platoon commander reading this sentence will react in one of two ways. Either he will be overwhelmed by the magnitude of the duties he has acquired with his newly earned commission or, being on the light-hearted side, will laugh off the statement as saying much, meaning little. Actually, the truth lies somewhere between the two viewpoints. Neither is a rifle platoon commander's task beyond the capabilities of the average intelligent man, nor is it one to be lightly dismissed.

The big day in the life of the new platoon commander is the one when he first stands in front of his platoon and introduces himself. To the average officer, it is a day, and an hour, he will remember throughout his career, not because of its world-shaking significance, but for the fact that to him it seems both the beginning and the end of that career. I believe this is true whether the officer has come from the Naval Academy, from a civilian college, or from the noncommissioned officer ranks. In the cases of the Academy graduate and college graduate platoon commanders, this position of command is new and strange. The platoon commander up from the ranks is confident enough of his ability to control the 44 men in front of him, but he is not exactly sure of how to do it as an officer. I speak of the average, of course. There are officers in the service who never had a moment's uneasiness in front of men from the day they received their second lieutenant's bars, but they are in the definite minority.

The new platoon commander, then, whether because he is not used to command, or because he is not certain of how to command as an officer, is usually nervous and ill at ease. According to his makeup, he will try to cover up this anxiety in one of several ways. Perhaps he will affect an almost Prussian military attitude, or he will attempt to appear singularly rough and tough, or he will adopt an excessively loose and relaxed air. Behind all this acting, if it can be called that, is a tremendous desire to please. This overzealous wish to be liked by his superiors and his men alike is common to new officers, and until they realize that they are accepted, and that duty sometimes forces an officer to be something else than the "good humor" man, it is a definite handicap to them.

During this "snapping in" phase, the platoon commander spends most of his time finding himself and it is sometimes a discouraging job. Often when he tries to apply the lessons learned in school, he finds they either boomerang or do not apply at all. A technique of teaching close order drill by making competition of it is looked upon with disfavor by his company commander, and perhaps even considered a joke by his men. He looks at the platoon bay and decides it would be much more shipshape if arranged similarly to the one he occupied while at Quantico, only to find out after he has made the change that his platoon's area does not quite harmonize either with the rest of the billeting areas in the barracks or, for that matter, with his company commander's ideas on the subject.

But the trial and error method eventually works, and if he is any kind of a man, the new platoon leader soon learns that he must compromise his plans and ideas so

The new platoon leader has to earn the respect of his men. He must apply the principles of the classroom to situations as they occur. Here are some pointers that an officer who has traversed this stage of military life passes on to the neophyte second lieutenant

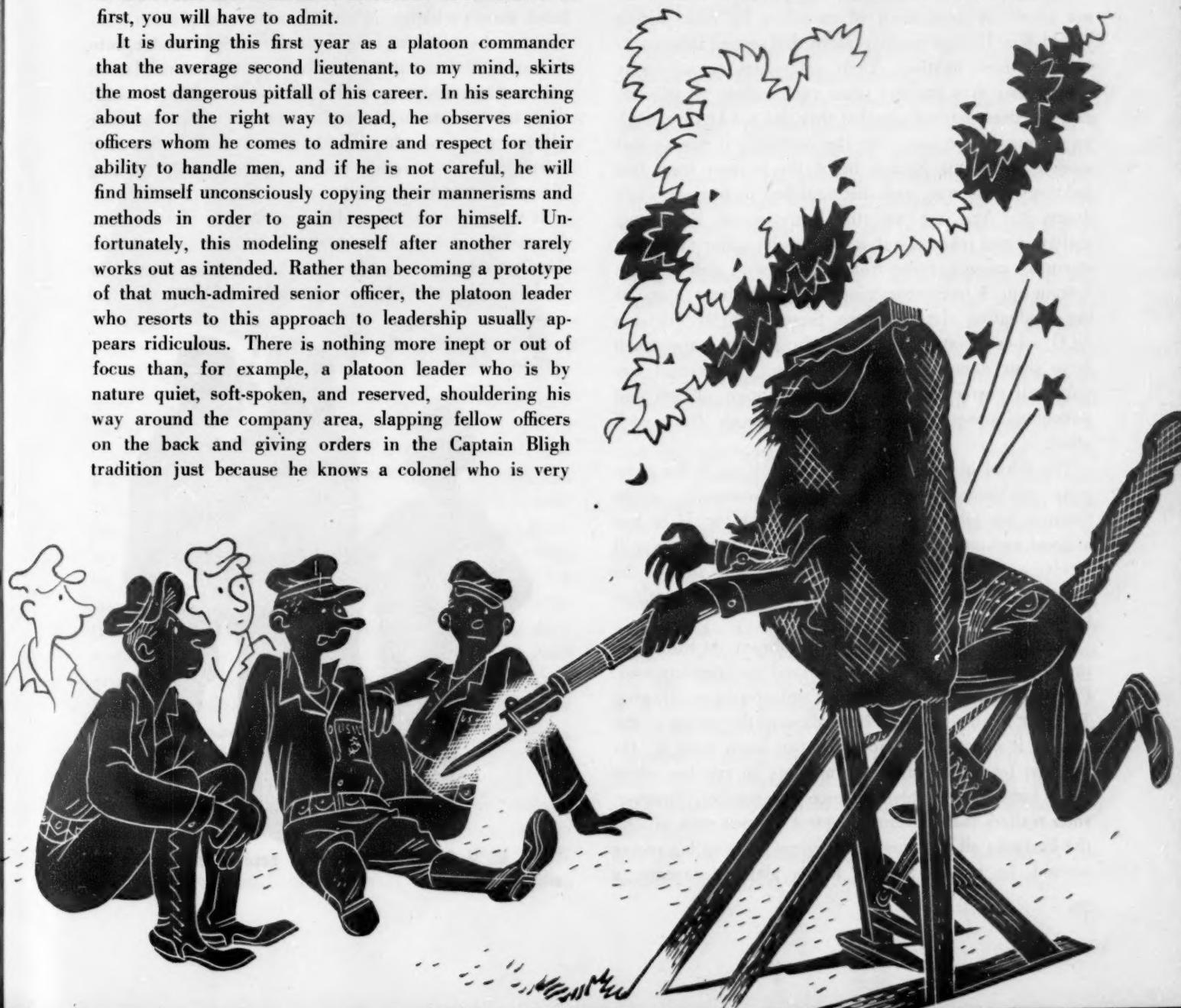
that they fit in with those of the company. I think this understanding that the 44 men are not only his platoon, but are also the company's platoon is one of the hardest blows in his indoctrination. Remember, the new platoon commander has spent many months planning for the time when he would have a "platoon of his own." During the regimented months at Quantico, that moment was his goal. Finally, when he received his platoon, raring to go and full to the brim with ideas on how to run it, it dawns on him that he is not the leader of a guerrilla band, free to do what he wishes when he wishes it, but that he and his platoon are part of a team, subject to the orders and controls of that team. A cruel blow at first, you will have to admit.

It is during this first year as a platoon commander that the average second lieutenant, to my mind, skirts the most dangerous pitfall of his career. In his searching about for the right way to lead, he observes senior officers whom he comes to admire and respect for their ability to handle men, and if he is not careful, he will find himself unconsciously copying their mannerisms and methods in order to gain respect for himself. Unfortunately, this modeling oneself after another rarely works out as intended. Rather than becoming a prototype of that much-admired senior officer, the platoon leader who resorts to this approach to leadership usually appears ridiculous. There is nothing more inept or out of focus than, for example, a platoon leader who is by nature quiet, soft-spoken, and reserved, shouldering his way around the company area, slapping fellow officers on the back and giving orders in the Captain Bligh tradition just because he knows a colonel who is very

effective doing these things. In *Hamlet*, when Polonius bade farewell to his son, he advised him thus: "This above all, to thine own self be true, and it must follow as the night the day, thou canst not then be false to any man." Perhaps the Marine Corps Schools would do well to repeat this quotation to each new officer as he passes through its portals on his way to taking over a rifle platoon.

Lastly, in my enumeration of the obstacles that the new platoon commander has to hurdle, is the definite

"He may find it opportune to demonstrate."





"There is a tendency within the services . . . to belittle the second lieutenant."

tendency within the services, and outside as well, to belittle the second lieutenant. Why this is true, I do not know. A breakdown of casualties by rank during World War II gives positive proof that second lieutenants were in there fighting. Their percentage casualty rate was greater than for any other rank, officer or enlisted, and this does not indicate that they did not know enough to get out of the way. On the contrary, it proves that second lieutenants figured in on the hardest front line fighting of the war, and distinguished themselves while doing it. And yet we still hear second lieutenants maligned and joked about, and these derogatory remarks, strangely enough, come from top down as well as from bottom up. A lieutenant colonel, in his address to one of the graduating classes of the Second Marine Division NCO school, stated that new officers can learn much from their noncommissioned officers. The colonel was only half correct in his statement. Junior officers and noncommissioned officers can learn much from each other.

The initial hurdles past, and his position in the company established, the new platoon commander settles down to his job of running his rifle platoon. If he has a good company commander, the only orders he will receive are those that concern his platoon as part of the company. The intra-platoon control is his to do with as he sees fit.

Probably, his first official act will have to do with some problem or situation occurring around the company area. Perhaps it will be some detail as uninspiring as drawing 782 gear for his platoon. Regardless of the nature of the task, if it affects his platoon, he can learn from it. On the first few such details, he may try to run the whole show himself. The alert platoon commander, however, soon realizes that he cannot control 44 men even around the barracks all by himself. At some point in his racing around, he notices that he has a platoon sergeant, a

platoon guide, and three squad leaders who do not appear to be very busy. His first reaction is that he has been saddled with some poor NCOs, but given a little time to think it over, he will usually come up with the right answer—that he has not given the NCOs a chance to exercise their command responsibilities.

At first, this delegation of responsibilities comes hard to a platoon commander. He will remember to work through his platoon sergeant, but without realizing it, he will find himself in the middle of things just when the platoon is in the process of carrying out the platoon sergeant's order. Eventually, however, assuming that his noncoms are capable, the platoon commander will gain enough confidence in his subordinates to assign them a task and let them complete it without interference from him. Here again, the platoon commander can go overboard on this delegation of responsibilities, and end up sitting in the company office in the best executive manner, while his platoon sergeant runs the platoon for him. In brief, there's a happy medium for which the platoon commander should strive, and it comes under "render unto Caesar those things that are Caesar's." Also, some platoon commanders misinterpret the axiom of working through their subordinates to the point where they summon their platoon sergeants whenever they want to issue the most trivial order to a squad leader, thus obviously running the system into the ground.

It usually is not too long after the new platoon commander has joined his company before he is faced with his first case of counseling and advising his men. The first few occasions of personal contact with his men and



". . . he is faced with his first case of counseling and advising his men."

their problems are apt to be bewildering to the junior officer. There is a tendency among some men to seek an interview with a new platoon commander just to test him out. Some of these posed problems are designed to confuse and hamstring their new officer, while others are invented with the hope that he will compassionately grant them special dispensations. The new officer confronted with these problems finds himself in a quandary deciding which are real and which are trumped up. If he is smart, he will treat them all as real, at least at first. By doing this, of course, he lays himself wide open to criticism from his NCOs, who know the men better, and also is in danger of acquiring the reputation of an easy

"A great percentage . . . have spent most of their lives going to school."



mark. All things being equal, it is far better for the new officer to risk being criticized for taking too much to heart inconsequential problems than ill-advisedly brushing aside one sincere problem. This duty of a platoon commander to counsel his men is of extreme importance. Men who are having difficulties with their personal affairs are not efficient Marines, and beyond this, are constantly on the brink of getting themselves into trouble until a solution has been found. I think most officers realize this fact, and in general do their utmost to help their men. With new, young platoon commanders, the main drawback to their handling of men's problems stems from their relative immaturity. A great percentage of platoon commanders have spent most of their lives going to school, and have had little experience coping with some of the problems brought to them by their men. The mistakes they make in giving counsel, however, are not ones of omission, but rather trying to give advice on problems about which they know nothing. Thus, faulty advice is often passed out by platoon commanders due to



"He is extremely vulnerable as far as additional duties are concerned."

their reluctance to admit that they are not sufficiently worldly wise to know the answers.

Before taking the new platoon leader away from the barracks and into the field, where he belongs anyway, I would like to mention one last obstacle confronting him. This obstacle is his extreme vulnerability as far as additional duties are concerned. Being a junior officer in the command lays him wide open to assignment on boards of survey, courts-martial, audits, inventories, and the like. These additional duties, often so time demanding and frustrating, and coming during the critical period of an officer's career, are, to put it bluntly, a pain in the neck. Oftentimes, the junior second lieutenant in a rifle company has so many additional duties he finds it difficult even remembering what they all are. His frame of mind also is not improved by sensing that his platoon NCOs feel they are being left holding the bag. There are few platoon commanders who take these extra duties with thorough good grace, but the good officer will carry them out to the best of his ability, and keep his grumbling to himself.

The new officer is usually anxious to take his platoon into the field, and rightly so. Whereas a platoon commander has many duties and responsibilities while his platoon is in the company area, he actually earns his pay when he is training his unit for its mission—combat. We're all aware of the field subjects basic to the individual Marine and to a rifle platoon, and I see no need of going into detail on them. I do consider it important to classify these subjects as to the demands they make on the leadership ability of the platoon commander.

First, we will discuss those subjects related to the individual Marine, such as camouflage, scouting, and

mapping. Here the platoon commander's task is one involving primarily organization and supervision, with participation subordinated. By this I mean that the platoon commander's main job is to plan the instruction, find a suitable area for the type instruction to be given, determine the time and space factors so as to permit the most instruction in the allotted time, make certain the necessary training aids are available, and finally, to supervise the instruction as presented to the men by their squad leaders. Leadership by the platoon commander is involved only to the extent that he must exercise tactful and close control over the methods of instruction employed by his subordinates, and that he sets up the instruction efficiently.

In instruction involving the fire teams and squads in his platoon, the platoon commander's responsibilities are similar to those he has in training of individuals, the only difference being that he may find it opportune to participate in the training to the extent of a demonstration. For example, in extended order drill for the squad, he can run a squad through the various formations before he turns over the instruction to his squad leaders. In no case, though, should he spend the entire instruction period training one squad at a time while the rest of the platoon loaf around. Squad tactics should be taught by squad leaders, and the platoon commander should supervise the whole show.

Platoon tactics, and other subjects concerned with the training of the platoon as a unit, demand of the platoon commander his utmost in leadership. He is faced with the task of organizing the platoon area. Once on the

"Platoon tactics . . . demand . . . his utmost in leadership."



"He must play the problem as realistically as any member of his platoon."

ground, he must lead his platoon and concurrently instruct and supervise his squads, no cinch at best. In this type of training, because of the multiplicity of his duties, the platoon commander must guard against slipping completely into the role of instructor, and neglecting his "leading." He must play the problem as realistically as any member of his platoon, taking advantage of cover and concealment, and moving tactically at all times if the problem is to be a success. This is easier said than done. The platoon commander, vitally interested in how the first squad is progressing on its flanking movement, is easily convinced that it would be better for him to step out in front of the problem where he can observe, rather than remain tactically in the underbrush. An incorrect decision, however, because the platoon commander has overlooked two important points: one, that the men in his platoon should not be asked to assume there is an enemy while their platoon commander is strolling around in plain view, and two, the platoon commander should not be conducting platoon problems if his squads are insufficiently trained to be supervised tactically.

The final classification of instruction, in relation to its demands on the platoon commander, concerns field training involving the platoon as part of the company. In instruction on this scale, many of the responsibilities that the platoon commander had during platoon problems are taken over by the company commander. The organization phase of the problem, in particular, becomes the company commander's responsibility. He selects the training area, determines the time and space factors, arranges for the movement of the company to the problem area, and finally plans the problem itself. The platoon commander may be called on to assist in this organization phase of the training, but final decisions are

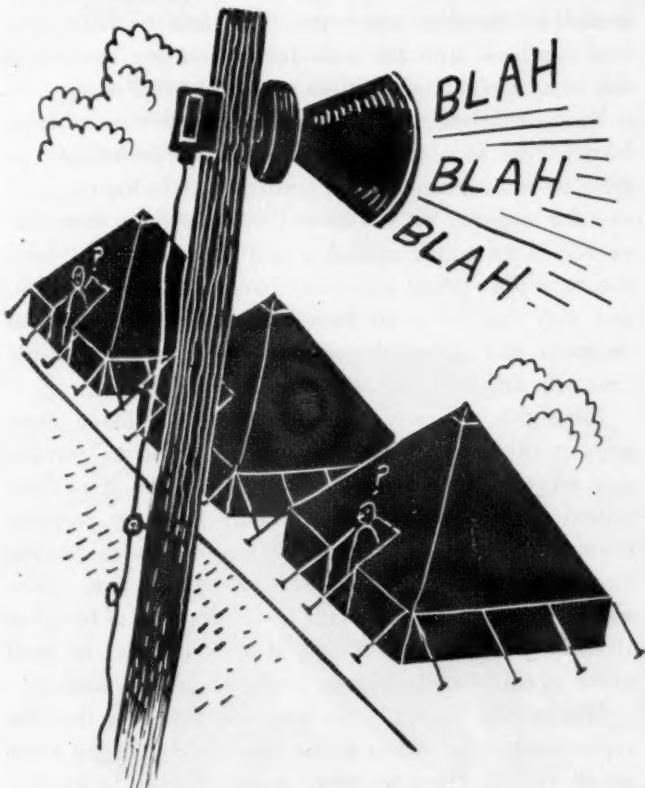
the company commander's. The company problem having begun, the demands on the platoon commander's leadership ability vary according to the situation and the tactics employed. It is risky to generalize on where a platoon commander's particular responsibilities begin and where they end during company tactics, but I want to point out the most obvious instances during company offensive combat problems when the platoon commander actually comes into his own.

• IN RIFLE COMPANY in the attack problems, we usually begin with the company moving in the route march or approach march phase. During this movement towards the enemy, the rifle platoon commander is mainly concerned with the control, security, and march discipline of his platoon. The opportunities to use his tactical troop leading steps and make tactical decisions are limited, since the company commander orders the direction, and rate of march, chooses march objectives, and, in brief, does most of the tactical thinking for the unit. During the attack and assault phase of the problem, the platoon commander may be called on to make all of the tactical decisions for his platoon, or at the other extreme, he may still be in a position where the tactical decisions are made for him by the company commander. For example, in an attack plan requiring a base of fire by two platoons

while the third platoon assaults the position, if his platoon is part of the base of fire, the platoon commander may find that his job is still one of control, pointing out targets for his squads, and otherwise regulating and adjusting the fire of his platoon. On the other hand, if the company commander in his attack order assigns the platoon commander an independent mission, the platoon commander, on being "shaken loose" from company control, becomes a commander in every sense of the word with the responsibility of not only controlling his platoon, but also making all the tactical and administrative decisions demanded by the situation.

In all company problems, the platoon commander must keep in mind that in addition to the responsibility of leading his platoon, he is also responsible for its training. His platoon should be capable of executing the missions assigned it by the company commander, but if it does have trouble, the platoon commander should take time during the problem to correct the mistakes. If the platoon is making an attack on a company objective, and the platoon commander observes that the squad leaders are not keeping their squads dispersed, he should make corrections on the spot, rather than overlooking errors in order to reach the objective at the time specified. It is far better for him to explain to his company commander the reason for a delay, than it is for him to allow his platoon to move incorrectly.

"... he must realize the absolute necessity of keeping his men informed."



• IN KEEPING with his training responsibility, the platoon commander must realize the absolute necessity of keeping his men informed. The training value of a company problem, as far as it applies to the individual Marine is greatly lessened if the platoon commander does not keep his men abreast of the situation. He must be careful to include in his orders to his squad leaders all pertinent information on the tactical situation, and also make certain that his orders are understood. He must allow sufficient time after his orders have been issued for his squad leaders to issue orders to their fire team leaders, and for them in turn to pass on the information to their men.

The training the platoon commander receives at the Marine Corps Schools and the experience he gains commanding a platoon in garrison have one purpose—success in combat. Much has been spoken and written on how the new platoon commander should conduct himself in the firefight, and most of the advice has been good, though because of contradictory statements resulting from personal viewpoints, it has a tendency to confuse as well as enlighten. I will attempt therefore, in this part of my discussion, to present only situations and problems that are likely to confront the platoon commander on his initiation into combat and to keep my personal opinions



"He has confidence in the units with which he operates."

and deductions subjugated. However, I say this with tongue in cheek, for it will not be easy to do.

There are, in general, two ways in which a platoon commander can enter combat: with the platoon he trained in garrison, or as a replacement officer joining a platoon already in combat. The rifle platoon commander who is fortunate enough to lead his own platoon into combat has few worries; that is, if he has been a conscientious leader in garrison. There are many factors on his side. First, he knows his men. Not only does he know them by name and by duty assignment, but transcending this, he knows their individual capabilities and limitations. He can select for a patrol over difficult terrain the squad leader who is most adept with a map and compass. He knows which of his men are best suited for scouting work, and, in brief, he can lighten his own burden by being reasonably sure he is fitting round pegs into round holes. True enough, he cannot be completely certain of how his men are going to perform in battle, but from his many opportunities to observe them around the barracks, on obstacle courses, hikes, and field training conducted under adverse terrain and weather conditions, he can make a good estimate of their battle performance.

Secondly, he knows the training level his unit has attained, and whereas I imagine a platoon commander has never taken his outfit into battle without wishing it better trained, he at least is aware of the gaps in its training. This awareness will often be useful when he has to make a decision involving whether he should remain at his platoon OP during the firefight or should actually get out in front and lead one of his squads making a difficult maneuver.

Thirdly, in terms of his part in the big picture, the platoon commander, through his familiarity with the company SOP, can take full advantage of the teamwork so important in successful combat. Through his intimate knowledge of what his company commander expects of

his platoon commanders, many unnecessary and time consuming instructions and orders are eliminated. This also rings true in his dealings with his subordinate leaders.

Perhaps a smaller point, but nevertheless a valid one, is the platoon commander's confidence in the units with which he operates. This applies to the other rifle platoons in the company and to the machine gun platoon and mortar section. As an example, the platoon commander who has watched his company mortar section pinpoint targets with its fire during garrison training, will have no hesitation in calling down close fire in combat when the situation demands it.

Lastly, and just as important as any of the practical considerations, is the sense of belonging which is so much to the advantage of the platoon commander who takes his own platoon into combat. The need to be a member of a group, while always a basic element in human nature, becomes paramount under fire.

THE PLATOON COMMANDER taking his own platoon into combat does not escape, however, all the anxieties connected with baptism by fire. The universal anxiety, how he will conduct himself when things get hot, is present regardless of his confidence in his platoon, his company, his contemporaries, and his superiors. Perhaps it is possible to state that this concern about his own actions in the firefight is amplified by his being with men who know him. The replacement officer at least has the consolation that if he goes to pieces, no one will know him well enough to take particular notice. The platoon commander who has been with his men during training easily can lose sleep imagining what his men will think about him if he cannot lead when leadership counts most. These fears in the face of combat are usually groundless, as the platoon commander soon realizes after he has engaged in a few actions. He discovers that his platoon does just as well in an attack against a real enemy fortified position as it did against a training bunker back in garrison, and also that he is so busy making the right tactical decisions and giving the right orders that he has little time left to worry about himself.

Joining a company as a replacement platoon commander, however, poses many more problems for the new officer. If he joins the company while it is committed to the firefight, he can only hope by personal example, by relying on his NCOs, and by evidencing knowledge of his job, that he can lead 44 men whose names he does not know. It is a bad situation at best, but if the new officer can handle it satisfactorily, he need never again lack confidence in his leadership ability.

Making the most of this situation demands that the replacement officer keep a few important points in mind at all times. First, to never allow himself to become

discouraged by his inability to run his new platoon the way he would like. The replacement platoon commander cannot hope to work directly with the squad leaders, but must give orders through his platoon sergeant, for he is the officer's main communication link with the men in the platoon. Secondly, he quickly must estimate his platoon sergeant's ability, and must be ready in the firefight to make instantaneous decisions on the basis of his platoon sergeant's experience in fighting the enemy versus his knowledge of platoon tactics. If the platoon commander from the start will make it clear to his platoon sergeant that he wants to make use of his combat experience, but that the final decisions on the employment of the platoon fall to him, the platoon commander, there should be no reason for conflict.

Lastly, he must realize that a firefight rarely goes smoothly and exactly according to plan. Too often, the new platoon commander blames his own inexperience for setbacks, losing confidence in himself and as a result becoming ineffective, when actually the foul-up probably would have occurred with an old campaigner at the wheel.

Perhaps the replacement platoon commander will join his new company while it is in reserve, giving him a little time to get to know his platoon. His first reaction will be that no one gives a particular damn about him, but he cannot allow himself to become sensitive. It is a natural attitude for a combat tested unit, and the platoon commander must be willing to bide his time until he can prove himself. This apparent disinterest on the part of the other officers in the company, and the men in his platoon, must not dissuade the replacement platoon commander from finding out everything he can about his unit and its manner of doing things in combat. This information will not be handed him on a silver platter; on the contrary, he will have to dig for it, and dig he

"He must realize that a firefight rarely . . . goes according to plan."



"He will soon find a confidence in himself. . ."

must even though he feels he is making himself appear more the boot by asking so many questions.

The replacement platoon commander must keep his orders to a minimum, observe, listen, and take care not to force himself on his platoon. Once in the firefight, and having proven to his men that he can control himself under fire, he will discover that his platoon is very willing to be controlled by him.

Troop leading in combat is the final test of the new platoon commander's real value as such. With combat experience under his belt, and the degree of maturity that inevitably accompanies such experience, the platoon commander will soon feel a confidence in himself that was wholly absent on the day that he first stood in front of his platoon and introduced himself. It will be his reward for long months of worry, hard work, study, minor successes and failures. He will be in a position to understand the truism that a rifle platoon commander's task is not beyond the capabilities of the average intelligent man, nor is it one to be lightly dismissed; rather, that it lies somewhere in between. He will know this is true because he will have seen those who subscribed to one extreme or the other fall by the wayside.

Experience will provide him with a new set of values, a new sense of proportion, and better perspective. But this same experience is something that he must gain for himself. The Marine Corps Schools can help to prepare a man to be a rifle platoon commander; his company commander and brother officers can do much to help him find himself and realize his immediate objective; but he alone can gain his own experience and reap its fullest benefit. And, in the end, it must remain largely his own, for there will be little that he can transmit effectively to the new lieutenant who is preparing to introduce himself to *his* new platoon.

USMC

In Brief

An answer to the problem of weapons "freezing up" in Korea has been found by TSgt Frank T. Versage, battalion ordnance and ammunition chief with the 5th Marines, 1st Marine Division. The trouble arose when cold weather set in. Ordinary lubricating oil sealed rifles and machine guns as though they had been welded. Washing the weapons with gasoline and firing them dry was tried but friction soon caused the mechanism to jam. TSgt Versage mixed graphite grease, diesel oil, 80 octane gasoline and No. 10 motor oil. Oil soon caused 100 per cent stoppages; non-treated weapons averaged 60 per cent. The rifles coated with the mixture fired without failure.

Quick and easy computation of aircraft performance data required by engineers and pilots is now possible thanks to a new slide rule that has been developed. Named the "Sky Rule," the six-inch, light-metal pocket guide is designed to give "on the spot" answers to common aeronautical problems without reference to books or charts. Scale markings are theoretically accurate to 1/10,000 of an inch. With this rule it is possible to determine at a glance the Mach number, true air speed, indicated air speed, density, altitude, temperature rise, and many other functions. Two scales permit conversion from degrees centigrade to degrees fahrenheit while two other scales convert from miles-per-hour to knots.

An electro-hydraulic "moto-lift," one-man mobile work tower, has now been designed. This tower is capable of raising 400 pounds 22-23 feet. The work platform is elevated through extension of a hydraulic ram powered by a six-volt automotive storage battery. If necessary the lift can telescope itself down to only seven feet for passing through doorways. Lowering of platform is at controlled speed which protects worker. The telescoping safety tube insures "a safe, gradual descent."

Reactivation work is underway at the Naval Air Station at Coco Solo in the Canal Zone, the Navy has announced. During World War II the station was used as a fleet air support and patrol plane base. It has been in partial maintenance. When the reactivation is complete a seaplane patrol squadron will be based there.

An Air Force Academy may soon take its place along side of Navy's Annapolis and Army's West Point. Seven prospective sites have been chosen for location of the proposed service college. Purpose of the Academy will be to provide a flow of college-trained men for entry directly into the Air Force. States mentioned to date for the site are: California, Colorado, Indiana, North Carolina, and Texas. The latter has three acceptable locations: Grapevine, Grayson County, and Randolph Air Force Base.

F-80s flew more than half of all fighter sorties in Korean action from the outbreak of the conflict through January, according to a report from Lockheed. Says the company, "In the first seven months of combat they flew 23,356 sorties, dropped 1,662 tons of bombs and fired 49,873 rockets and 19,810,852 rounds of ammunition. . . The Shooting Stars accounted for 58 confirmed enemy planes. . . and 36 probably destroyed. A total of 65 F-80s were lost to all causes, but less than half to enemy action, and only four were shot down by enemy planes. . . F-80s averaged one loss to all causes in every 404 sorties, with only one loss to enemy action in every 909 sorties."

The spotlight is on tanks! Recently the premier showing of the T-41, latest answer to possible future tank warfare, was given for President Harry S. Truman at Aberdeen, Md. The President was inspecting the new armored equipment. Heavy-slugging T-41s were the star of the show.





The F7U-3 Cutlass, another "more than 600 miles-per-hour" jet fighter is now in production for the Navy. This twin-jet, tailless fighter is "potentially capable of speeds in excess of models of operational jets, land or carrier based." Capt Frederick M. Trapnell, USN, former naval test coordinator at Patuxent, Md., terms the plane: "perhaps the most radical departure we've had in a service-designed airplane." First model flew a year ago. Now the plane is ready to be produced in quantity. This plane has been designed for "any ceiling at which we can visualize we would have to conduct fighter operations."

A 600-inch "radio telescope" is being installed by the Navy at the Naval Research Laboratory where it will be used to study radio "signals" from the sun, moon, and the stars. Although energy is continually emitted from the solar system, visual study of these radiations is limited to two windows. One, the range of the spectrum, the other, the microwave radio range which enables much greater study. The visible portion of the spectrum is only a very small portion of the whole. It is hoped that the high sensitivity will permit observers to distinguish between different areas on the sun, and thus study sun spots and hydrogen "flares."

Republic's F-84F, the Air Force's swept-wing fighter bomber, recently completed its first successful flight powered by the British-designed "Sapphire" jet engine rated at 7200 pounds of thrust. The aircraft took off from Edwards Air Force Base at Muroc, California, and remained aloft approximately 50 minutes. The plane was originally flown with an Allison J-35 jet engine rated at 5200 pounds of thrust. The new engine has been designated the J-65.

Britain's armed forces are rapidly approaching the million mark. Regular forces, made up of professionals and conscriptees, number nearly 800,000. Territorial and auxiliary services contain about 150,000 trained men. In addition numerous reserves will be called up for refresher training this summer. The Army will call up 235,000 specially trained men for 15 days duty. The Royal Air Force will call 11,000, 1,000 of these for three months duty, and the Royal Navy will call 6,600, all of these for 18 months service. The four million veterans of World War II have not been formally demobilized and serve as an additional reserve.

Transportable microwave communications equipment, incorporating the best features of both radio and telephone, may help speed the day when troops can completely stop stringing and protecting long lines from battle fronts to rear areas. Such equipment is now being prepared by General Electric. The stations will be able to handle eight conversations at one time. Each station is mounted in a single shelter and moved by a single truck. The equipment can also be moved by air. Automatic repeater stations will make possible long distance relaying, needed in places like mountainous Koera. Distances of 50 miles can be handled by each unit.

The Statitron, an electron hammer that strikes 60,000 billion times per second during the testing of metals, is used by North American Aviation. This machine does not smash atoms but displaces, thus changing the physical properties of a test piece of metal. States NAA, "Physicists then can determine the amount of energy required for such displacement." The Statitron hauls the particle slowly up a high "electrical hill" on a moving insulated belt and then lets it fall down the "hill."

First post-war antisubmarine submarine, the K-1, was recently launched by the Navy at Groton, Conn. The K-1 is 195 feet long and displaces 750 tons as compared to the present fleet submarine which is 311 feet long and displaces 1,500 tons. Latest developments in sonar and other electronic detection equipment has been utilized in the sub killer. This is the second ship to be so designated. The first was completed back in 1914, served during World War I and was decommissioned in 1922.

Going Overseas?

By LtCol. J. A. Donovan, Jr.

OFFICERS FACING THE POSSIBILITY OF A TRANSFER to the FMF or of field service overseas have not only the normal problems of squaring away their families and personal affairs to meet the exigencies of war and separations—but they also have the problems of their own field equipment. What and how much personal gear should an officer take overseas?

In the past war Americans demonstrated that they liked to travel in the grand manner with all the comforts and luxuries possible—including their favorite Coke machine—if they could get away with it.

War experience also proved to Marines that the closer their duty took them to front line service, the less in the way of creature comforts they could afford. The front line infantry Marine had little more than what he could carry, whereas the artilleryman only a few hundred yards back lived a comparatively normal existence with clothing changes, shaving facilities, warm food, and even cots at times. The distance from the enemy and the amount of unit motor transport available have a very noticeable effect upon the standard of living and the mobility of the fighting Marine.

At best however, the Marine as compared to other services lives a Spartan existence in the field. The logistical restrictions of our amphibious role predicate

a minimum of "wheels" for luggage and personal equipment. But in spite of our inherent effort to maintain mobility, Marines naturally attempt to provide for their personal comforts as much as possible. Most enlisted Marines are pretty well confined in this respect, but officers taking advantage of the privileges of their rank are constant offenders of the principles of personal mobility. Some don't know any better because they are at first inexperienced in the problems of field service—others feel that their rank entitles them to all sorts of trunks, boxes, radios and rolls, and devil take the junior officer who makes any comments.

(I know whereof I speak, having spent a full eight hours one day, as a young lieutenant supervising the unloading and collecting of the 14 pieces of gear and luggage that belonged to a distinguished senior Marine bringing his unit back from Iceland in 1942.)

There should be a happy medium wherein just what most officers need or are allowed to take overseas is prescribed. If mobility can't be acquired voluntarily by officers, then responsible commanders should enforce it.

Far be it for me to try and tell senior officers what they should take on expeditionary service, so the following advice is freely offered to company grade officers and others who may wonder just what is best and most needed to make life a bit better during extended field service—and still not become bogged down under personal impedimenta.

An officer should plan to travel with three combat loaded echelons of equipment:

1.—His essential personal and fighting clothing and equipment that he carries into battle.

2.—The extra clothing he can take aboard ship or plane in a clothing roll or a val-a-pack, and have carried in the unit train in combat.

3.—One locker trunk for use in rest area and rehabilitation camps. This trunk should move in division or wing rear echelons or be kept stowed in advance base depots until required. Staff officers above regimental or group level should also be allowed professional book boxes for pertinent manuals, references, and of course, their Marine Corps Schools' notes.

The following check list of clothing and equipment is believed to be a good sensible guide for the average



officer in planning his personal needs on expeditionary service. Extremes in weather will require modifications of this list.

Item	Worn by individual and in pack	Clothing roll or bag	Officer's locker trunk
2 Garrison Caps, WS		1	1
2 Garrison Caps, SS		1	1
1 Cap Utility or Cotton, OD	1		
1 Jacket Elastique, WS			1
1 Jacket, Kersey		1	
1 Pair Trousers, Elastique, WS			1
1 Pair Trousers, Kersey		1	
2 Coats, Utility	1	1	
2 Trousers, Utility		1	
6 pairs Cotton Underwear	2	2	2
6 Pairs Socks, Cushion Sole	2	3	1
1 Wool Muffler		1	
4 Pairs Socks Brown			4
2 Pairs Combat or Parachute Type Boots	1		1
1 Pair Brown Shoes			1
1 Field Jacket, M1943	1		
1 Wool Sweater, OD		1	
2 Shirts, Flannel		2	
5 Shirts, SS		2	3
1 Jacket, SS			1
1 Pair Gloves, Leather		1	
4 Trousers, SS		2	2
4 Neckties		1	3
2 Web Belts	1	1	
1 Trenchcoat, W/Wool Liner			1
1 Plastic Raincoat or Poncho		1	
1 Pocket Size, 6X15 Binoculars		1	
1 Suit Woolen Underwear		1	
8 Handkerchiefs		3	4
1 Helmet and Liner			
1 Pack or Musette Bag		1	
1 Sleeping Bag (Carried in Unit train)		1	
1 Scout Type Pocket Knife		1	
1 Flashlight		1	
1 Pocket Stove, Gasoline (Carried on vehicle when pos- sible)		1	
1 Gasoline Lantern			1
1 Screw Type Can Opener		1	
1 Beer Can Opener		1	
1 Plastic Coffee Cup		1	
Spoon and Knife		1	
Toilet Gear (In compact case)		1	
2-5 Small Towels	1	2	2
Sewing Kit (Small)		1	
3 Nail clippers	1	1	1
Writing Equipment		1	
	Replace- ments	Replace- ments	

(Note: this list is based upon the assumption that certain basic clothing items will eventually be replenished via normal supply channels in the field. However Korea has again demonstrated that many items are not always available in balanced stocks.)

It will be noted that this list, though long, is not liberal. Most officers tend to take too many clothes. Certain items listed are normally organizational issue, however an officer can afford to buy these items to insure that he has what he wants, or that it fits.

Such items as field jackets, combat boots, pocket cookers, gasoline lanterns, sleeping bags, and air mat-

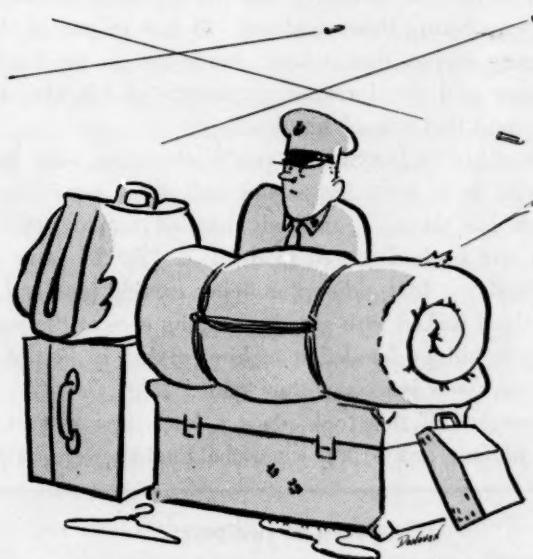


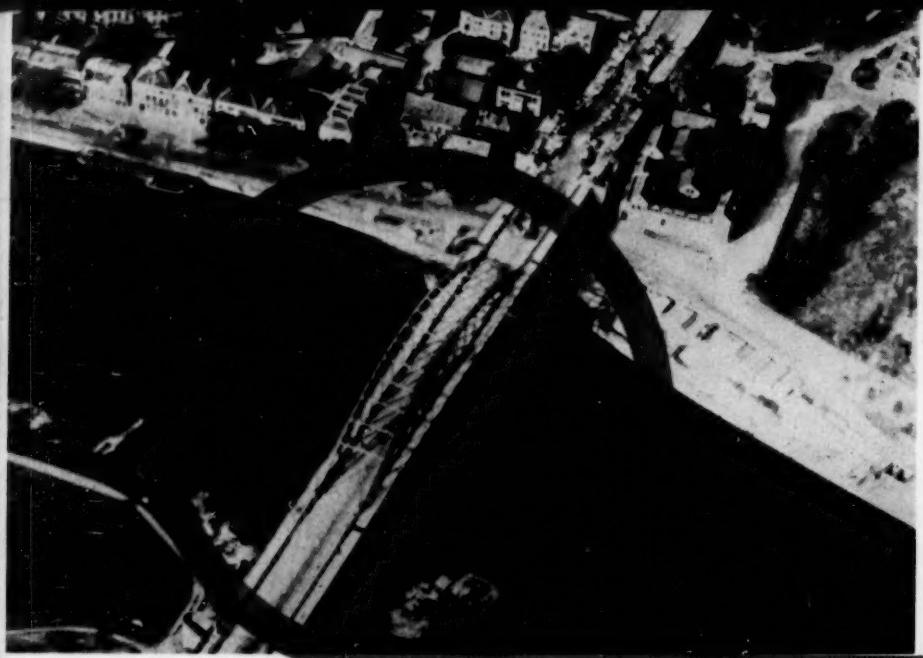
tresses are either not always available or are so valuable and such basic items that the smart officer will provide his own.

Each officer should consider every piece of clothing and each item of equipment that he takes overseas from the viewpoint of field service needs. Compactness, light weight, rugged construction, and utility should be the prime considerations in selecting equipment. This writer believes that a good sleeping bag and a pocket stove to heat coffee and rations are of priority importance in the field, and a gasoline lantern can make rest area tent life bearable.

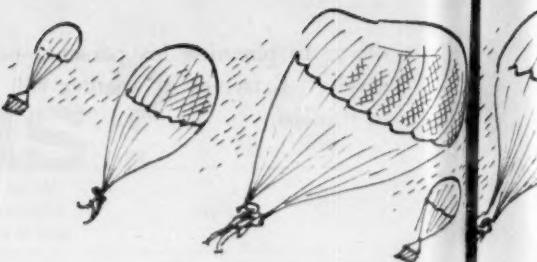
Officers who give detailed thought to the planning of their personal equipment with its mobility the main consideration will never get behind-the-back growls from "working parties" unloading or loading "officers' luggage," nor will they unduly contribute to the confusion when their unit has to load its gear and make a fast move.

USMC





Official War Office



THE

By Col Rathvon McC. Tompkins

The plan was simple. British airborne troops had orders to take and hold the big bridge at Arnhem until the main Allied armies could get there. Seemingly well executed at first, the operation turned into a disaster despite the "hold or die" effort to succeed

FRAU GRIITHISENS LIVED IN A PLEASANT STONE house built on the site of the old Roman city of Arcenum on the northern bank of the Rhine. It was to her home on the 22d day of September that they brought gallant Sir Phillip Sidney to die. This was after the memorable fight at Zutphen where five or six hundred Englishmen bore themselves most bravely against five times their number and the flower of the Duke of Parma's army. The record shows that several times the little band of Englishmen, totally surrounded by greatly superior numbers, charged so savagely that the Spanish broke and gave way before these madmen. It was in one of these desperate sorties that Sidney, son-in-law to the Earl of Leicester and the foremost gentleman of his age, took the wound that caused his death.

It was Sir Phillip Sidney, you'll remember, who, burning with fever from his wound, called for something to quench his thirst. Somebody handed him a bottle of water and he had started to drink it. At the same moment a dying footsoldier was being carried past and the poor devil looked with greedy, begging eyes at the water. Instantly Sidney handed it to him, saying as he did so: "Thy necessity is greater than mine."

However, all this took place a long time ago in the Year of Our Lord 1586 when the English were helping

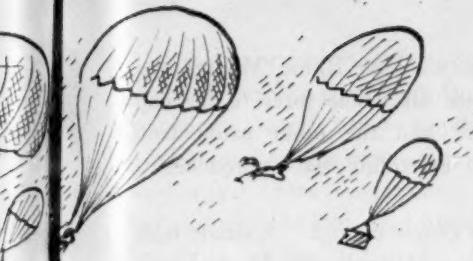
the Netherlands in their fight against Spain. And the name of the handsome town which stood on the site of the old Roman city of Arcenum, on the north bank of the Rhine, was Arnhem.

On a golden autumn day almost 358 years later, on the 17th of September 1944 to be exact, the sky over Arnhem was crowded with the parachutes and gliders carrying the 1st British Airborne Division to earth and the beginning of one of the most desperate fights in history. It is fitting, but more than passing strange, that over three centuries earlier the most polished, gentle nobleman of the Elizabethan Age should have died at Arnhem. For it was at Arnhem, in the fields outside the town and in the town itself, that he was joined in death by many worthy countrymen of a later age but of the same daring stamp that marked Sidney.

Why did the British come back to that quiet ancient town in Holland? To answer that question will mean turning back the pages of history—not far, it is true, though already the memory of the last war is gathering dust on the backstairs of men's minds and people talk restlessly of wars yet to come. But make the effort and you may understand why these airborne soldiers dropped from the skies over Arnhem to fight with what they could carry with them and to die there when they could fight no longer.

Can you remember the big picture in northwest Europe during the summer and fall of 1944? It was this:

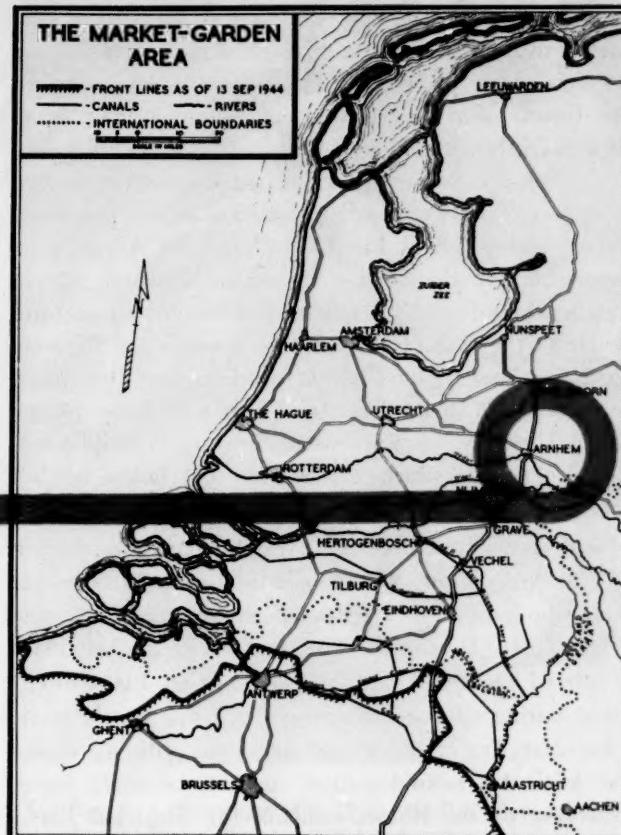
Part I of two parts



BRIDGE

While the British and the Canadians were slugging it out with the bulk of the Panzer Divisions (six by mid-July) the Germans threw in against the Normandy beach-head, the Americans punched a hole into the enemy lines at St. Lo and through this gap, running like quicksilver, poured the crushing weight of Bradley's armored columns. The story of the breakout has been written too often to need retelling here. After the slaughter of the Argentan-Falaise pocket, Marshall von Kluge's Seventh Army and Fifth Panzer Army began streaming back towards the Seine and the German frontier. The racing Allied divisions rolled like wildfire through the fair fields of northern France with the Bocage country and its nightmare of hedgerows safely behind them. Up from the south Dever's Sixth Army Group were thrusting through the rich Rhone valley. Our side had the ball and we were riding free, wide, and handsome in the late summer of 1944. Hopes were high that Christmas would see the end of the war in Europe. The Germans were beaten; it was just a question of time before they came to their senses and admitted it. Of course there would be fighting and maybe there would be some pretty sticky places, but it ought to be cleaned up by Christmas.

As the last days of August faded into September Patton was hammering at the gates of the fortress city of Metz, while the British with brilliant dash had pushed their Second Army all the way into Antwerp. We had the ball all right, but we found we were stopped dead in our tracks. Stopped not by anything that the enemy was doing, but because it was simply impossible for the supply lines, running all the way back to the Normandy coast, to handle the load. The supply people did wonders, though you can't expect miracles to be performed indefinitely. When you realize that on one day in September, for example, the American First Army alone used



over 650,000 gallons of gasoline, the logistical problem of modern warfare begins to have some meaning. As a matter of fact it took over 6,000 tons of supplies daily just to keep this one army in action. Because of difficulties like these it came about that by early fall none of the Allied fighting formations had supplies either on hand or in sight to undertake a sustained major offensive. A modern army moves on its wheels and the wheels weren't turning now.

The British on the left end of the line held a bridge-head position on the far side of the Meuse-Escaut Canal. Before them, not much over 60 miles away, lay the lower Rhine. Once over the Rhine one had only to turn to the east to enter the Ruhr and the great industrial center of the German Third Reich. The British armies, like the Americans on their right, could not move up supplies fast enough to keep the combat columns on the prowl . . . and time was running out for the Allies. For 20 centuries the winter weather of northwest Europe had plagued fighting men and added notably to the ordinary horrors of war. Winter comes early to that part of the world with much rain and, later on, a slashing, freezing sleet. If the offensive were ever to be mounted it would have to get underway very quickly, or wait until the early days of the spring of the following year.

The German Wehrmacht had a lot of smart professional soldiers in their ranks and they weren't the ones

to look a gift horse in the mouth. With the Allied drive clanking to a halt, the enemy recovered his posture sufficiently to regroup and take up the best possible defensive positions along his front. The Fifteenth Army, under Gen Gustav von Zangen who had lately arrived from the Italian theatre, clung bitterly to the island defenses of the Scheldt Estuary covering the approaches to the great port of Antwerp and so denied it to our use. Gen Alfred Schlemm and his First Parachute Army were responsible for the defense of central Holland, which contains three important water barriers running perpendicular to the axis of any advance towards the German frontier. Nearest the British position was the Maas River, beyond that the Waal, and finally the lower Rhine itself. The Germans worked like beavers to build up a defensive system which would make the fullest use of these natural obstacles.

Field Marshal Sir Bernard L. Montgomery commanded the 21st Army group which included the British Second Army who held the bridgehead position over the Meuse-Escaut Canal. During the first week in September 1944 he offered the Supreme Commander, Gen Eisenhower, a most daring scheme. His proposition was simply this: If his 21st Army Group was supported with all available Anglo-American logistical support, he could force a crossing of the Rhine, outflank the Siegfried Line, and drive on into Berlin. This was in fact the "narrow front" idea about which there has been and always will be so much controversy. The "narrow front" called for a single knife stab into the very heart of Germany—a blow to be backed up by every bit of logistic assistance that the Allies could muster, even though it meant that the other formations would be virtually grounded in the meanwhile. Opposed to this concept was the "broad front" which called for constant, though of necessity limited, offensive actions along the entire front until such time as the supply situation mended sufficiently to permit an all-out, general offensive. The staff colleges will have to argue about who was right and who was wrong, for it is no concern of ours at this late date.

As a matter of record, however, you should know that a sort of compromise decision was reached on the 10th of September. In Brussels on that date Gen Eisenhower authorized Field Marshal Montgomery "to defer the clearing out of the Antwerp approaches in the effort to seize the bridgehead"¹ over the Rhine. To assist in this effort he was allocated the First Allied Airborne Army, which consisted of the American 82d and 101st Airborne Divisions and the British 1st Airborne Division. The target date was set for September 17th, 1944. Gen Eisenhower promised to do his utmost to insure that adequate supplies were available for the operation. After

establishing the bridgehead over the Rhine, Montgomery was to "turn instantly with his whole force to the capture of Walcheren Island and the other areas from which the Germans were defending the approaches to Antwerp."²

Montgomery's plan was simple enough. A single main highway leads almost straight from the Meuse-Escaut Canal through Eindhoven, Vechel, Grave, Nijmegen, and across the Rhine at Arnhem to the Zuider Zee. His intention was to employ the three airborne divisions to seize the vital crossings over the main water barriers that stood between the British Second Army and Germany. The 101st Airborne Division was to secure the roads and crossings between Eindhoven and Grave; the 82d Airborne Division was to secure the bridges spanning the Maas at Grave and the Waal at Nijmegen; the British 1st Airborne Division was to capture and hold the bridge over the Rhine at Arnhem. The British were to drop farthest away from the front lines, but the planners called for a quick link-up and reckoned that the 1st Airborne Division would be relieved within 48 hours.

The XXXth Corps was to barrel down the main road, with the Guards Armored Division spearheading the attack. The XXXth Corps was commanded by LtGen B. G. Horrocks of Western Desert fame; he was told to drive forward with the utmost possible speed, disregarding his flanks entirely. The VIIIth and XIIth Corps, advancing on each side of the main road but more slowly because of the terrain, would take care of the flanks. The country in this area is cut up by innumerable low, wet fields with small dike-like enclosures typical of this part of Holland; armored fighting vehicles cannot operate off the roads here. It's "hi-diddle-diddle straight down the middle"—or nothing.

(*The whole situation on the Western Front was a matter of very grave concern to the German High Command in the fall of 1944. While the High Command realized the Allies had sufficient airborne troops to make a large airborne landing, they felt that such a landing would only occur in conjunction with an amphibious assault aimed at some point behind the German lines. The airborne landings came as a surprise because of the time and place they were made. By mid-September the consolidation of German forces had progressed to such a point that they considered an airborne landing in central Holland too risky for the Allies to undertake. Moreover, the Germans were certain that the canals so prevalent in this area made the terrain unsuitable for the operations of the armored columns that would have to be used to relieve the airborne troops.*)³

¹Ibid.

³Interrogation of Dr. Wilhelm H. Scherdt, OKW Historical Section, General Interrogation Brief No. 11, Seventh Army Interrogation Center.

¹Crusade in Europe, Eisenhower; Doubleday and Co., 1948.

It is a sobering thought to realize that, after five long years of war, the combined Anglo-American resources in transport aircraft were insufficient to move the total combatant elements of the three airborne divisions simultaneously. There were planes enough to lift only nine battalions of the 82d, nine battalions of the 101st, and six battalions of the British 1st Airborne Divisions. This scarcity of suitable planes meant that none of the three airborne divisions would enter combat with all the men and the equipment which they needed and should have had and there was a good military reason for giving the British division even less aircraft than were allocated to the Americans. It was absolutely imperative the initial crossings near the Meuse-Escaut Canal be captured and held firmly if the XXXth Corps was ever to successfully break out of its bridgehead position. If they could not break out and roll, then nothing on God's green earth could help that lone airborne division 60 miles away and on the far side of the Rhine. For this reason the 1st Airborne Division had even less of its combat strength on the fateful first day than did the Americans to the south of them. War, as someone has undoubtedly said, is doing what you can with what you have available.

Sunday, September the 17th 1944, was a nice day in England. (Halfway around the world it was D plus 2 at Peleliu and the men of the 1st Marine Division were clawing their way forward against Bloody Nose Ridge.) The streams of transports and tugs with their gliders floating along behind them seemed to fill the skies. It was a thrilling and moving sight to see all those hundreds of planes thundering towards the Continent. Obviously something big was up, but few people then gussed they were watching the start of the largest airborne operation in the history of war—Operation MARKET.

Deservedly, much has been written of the actions of the American airborne divisions and the part they played in carrying out this operation. The officers and men of those formations by their deeds wrote a brilliant chapter in the story of American arms that will last as long as the history of our country lasts.

Not so much is known in this country about the ordeal the British paratroopers were undergoing to the north in Arnhem an ordeal endured bloodily with great fortitude against an enemy of superior numbers, equipped with heavier weapons and unlimited supplies. When you're on the winning side in combat there's a certain uplift that will carry the ordinary mortal to unsuspected efforts in spite of his fears, the grinding fatigue, and a deep-rooted suspicion that there is no future in such work. There is nothing particularly remarkable in this unless it proves man is an adaptable animal. However, when the picture changes and there is no hope of winning, when it's obvious that the gamble will never come off, and still



Official War Office Photo

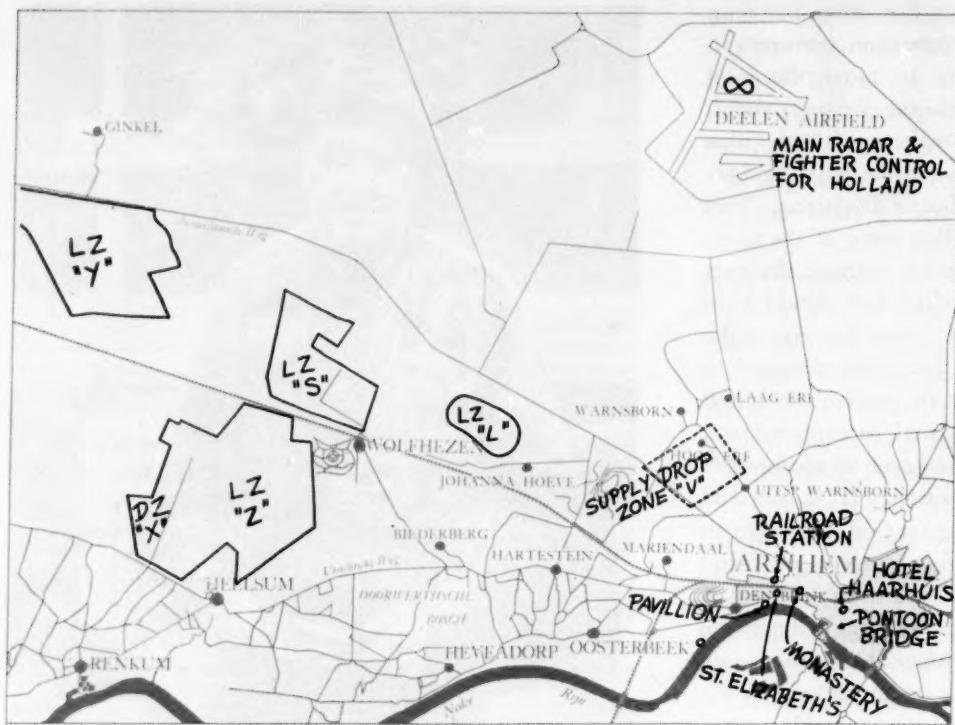
MajGen R. E. Urquhart, CB, DSO and Bar, Commander of the 1st Airborne Division, at his headquarters, Arnhem.

men fight on because they conceive it their duty (whatever that may mean to you) rather than throw in the towel and surrender . . . then, I suggest, something near the ultimate in courage is reached. Your intellectual may denounce such action as plain stupidity. I do not think it is. But let me tell you the story of this 1st British Airborne Division and the things they did there in Holland in September of 1944 and you can judge for yourself.

The British, in the first lift on D-day the 17th, planned to send in the 1st Parachute Brigade⁴ and a part of the 1st Airlanding Brigade, together with certain reinforcing units. The parachutists were to seize as their main objective the big highway bridge that spans the lower Rhine at Arnhem, with a secondary mission of securing the railway bridge a little farther downstream. The portion of the Airlanding Brigade would hold the drop and landing zones until the second lift could be brought in on the morning of D plus 1, whereupon this Airlanding Brigade, by then at normal strength, would form a defensive perimeter around the western outskirts of Arnhem.

The 4th Parachute Brigade, coming in with the second lift on the morning of D plus 1, would move to the east and continue the perimeter line along the high ground

⁴British brigade is equivalent of U. S. regiment.



just north of Arnhem and so link up with the 1st Parachute Brigade which would be holding the main bridge on the Arnhem-Apeldoorn highway.

The 1st Polish Parachute Brigade Group, under command of the 1st British Airborne Division for this operation, in the third lift on D plus 1, was to drop south of the Rhine immediately opposite Arnhem, cross the river by the main bridge, and occupy a position on the eastern outskirts of the town.

Thus there would be formed a defensive cordon, roughly in the shape of a horseshoe, with the all-important Rhine bridge safely tucked in the middle. It would be necessary to hold on for only about 48 hours at the most and then the XXXth Corps with the whole British Second Army in their wake would be smashing through from the south to put things under firm control.

It was a good scheme, shrewdly thought out, and offered every chance of success. The intelligence people summed up the enemy situation on 13 September in the following words: ". . . there is no direct, recent evidence on which to base an estimate of the troops in the immediate divisional area. The capacity of the normal barracks in Arnhem, Velp, and Ede is nearly 10,000, and billeting possibilities are considerable; moreover, Arnhem itself, if the enemy's main defensive line is on the Waal, will be a vital center on his line of communications, and will inevitably contain a number of troops which are out of the line; it will be strongly defended as soon as the line is manned, but at present may be emptier while their fighting withdrawal from the Albert [Meuse]-Escaut the available troops are digging trenches or conducting

Canal . . ."⁵ It was unfortunate that no one on our side knew the 2d SS Panzer Corps, consisting of the 9th and the 10th SS Panzer Divisions, was at that very moment resting and re-fitting just a few miles north of Arnhem.

One of the requirements of a successful airborne operation is to drop your troops as close as possible to their objectives, yet not route the helpless transport planes too close to enemy antiaircraft installations. It was a matter of common knowledge that the Germans had installed a considerable number of medium and heavy flak guns in Arnhem, particularly in the vicinity of the main

bridge. The Deelen airfield on the northern outskirts of the town was also heavily defended, since it was the main fighter and radar control for Holland.

For this reason, then, the drop and landing zones at Arnhem were all located five-eight miles away from the objective bridges. It's quite a distance when you realize that an airborne division has to depend almost entirely on plain old walking for their battlefield mobility. Moving on foot is not a very speedy way of getting around on an operation in which the priceless element of surprise must be capitalized on without delay if it is to pay the expected rewards. Perhaps it would have been better to drop the troops closer to the bridge and take a chance on the flak, but hindsight is useless and it's easy enough to be wise after the event.

Anyway, a little before noon on that Sunday in September the planes carrying the Marker Force crossed the Rhine and headed northwest of Arnhem. As they passed over the river the troopers standing in the open doors of the aircraft had no trouble in recognizing their assigned dropping areas. As they had been told in pre-flight briefings, the dark brown fields and peat beds dotting the countryside under them were very much like the heath country in southern England, particularly the Aldershot training grounds around Lafflin's Plain and the Long Valley where the infantry used to maneuver in exercises before the war. The green light on the forward bulkhead blinked and out of the planes the jumpers spilled one after another. England was a long way off.

It was their job to set up the identification markers and the homing devices which would enable the planes carrying the first lift of the division to find their assigned drop and landing zones; within 30 minutes of landing the beacons were in place and all was ready. This Marker Force—the 21st Independent Parachute Company—had had rather a humdrum trip to the target, without mishap either on the passage in or while parachuting down. They were saved from complete boredom when they managed to capture 15 German soldiers who came swanning along a short while later, apparently overcome with curiosity to learn what was taking place in the fields near Wolfhazen.

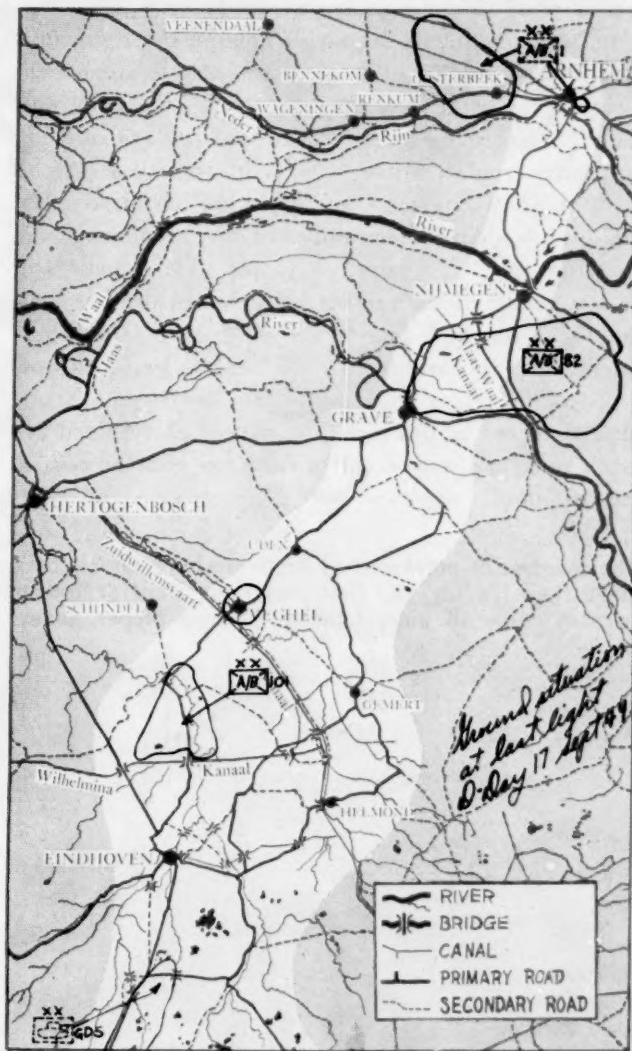
At 12:40 p.m., just 10 minutes ahead of the planned schedule, the first lift began coming in. Both the glider and the parachute landings were extraordinarily successful, over 95% of the troops and equipment being put down at the right place at the right time, a record not previously attained either in practice or on actual operations. As a matter of fact the gliders came in ahead of the paratroopers instead of following them in, as is more customary in these matters. No harm was done by this reversal of form other than the natural embarrassment suffered by the paratroopers, a notoriously proud breed, who secretly (and not so secretly) consider themselves rather superior in much the same way that Marines look down on other less fortunate folk.

♦ A PIPER OF THE 7TH BATTALION of the King's Own Scottish Borderers of the Airlanding Brigade stalked up and down their landing zone with his bagpipes squealing the Regimental air "The Blue Bonnets Over the Border." The Airlanding Brigade, or rather that part which had come in on the first lift, immediately took over the defense of the division's drop and landing zones so that the second lift, due on the morning of D plus 1, could land safely. Meanwhile the 1st Parachute Brigade was preparing to get on with their mission of securing the vital bridge in accordance with the following plan: The 2d Battalion would move from the village of Heelsum, their rendezvous point, along a road running close to the north bank of the Rhine and thence through Arnhem to capture the highway bridge. At the same time the 3d Battalion would move along the main Heelsum-Arnhem road in order to assist the 2d Battalion by approaching the objective from the north. The 1st Battalion, initially in reserve, would be prepared, on order, to assist the other battalions or take over the mission of either one. After the bridge was secured, and if not otherwise engaged in more pressing business, they would occupy the high ground to the north of the town.

It was not quite three o'clock on that pleasant Sunday afternoon when LtCol J. D. Frost started his 2d Battalion of the 1st Parachute Brigade through the little village of

Heelsum which laid just to the south of their drop zone. This man Frost was an ideal type of combat officer who had been in the airborne business almost from its start in the British Army. He had been a member of that almost classic raid at Bruneval; and had lived to fight in North Africa, Sicily, and Italy. A tallish dark man, it was his pleasure to carry a silver foxhunting horn which he would blow to rally his people to him. Thoroughly tested and completely competent, he was a man the 2d Battalion was content to follow wherever he might choose to lead them.

The villagers were happy to see the Englishmen and offered them food and cups of tea as the grinning files clumped along the main street of Heelsum, weighted down with all the weapons, tools, and appurtenances that are so necessary if one follows the profession of arms in a forward combat zone. Better than the refreshments, though, was the news that in Arnhem itself at that moment there were relatively few Germans. The battalion took foot in hand, as the expression has it, and went down the Oosterbeek-Arnhem road at their best speed.





17 September 1944—on their way to Arnhem and destiny.

They were two miles along their way and close onto the hamlet of Heveadorp when they were lashed by machine gun and mortar fire coming from what later proved to be the extreme southern flank of a strong enemy position extending northwards through the Doowerthsche woods and covering the western approaches to Arnhem. After some brisk fighting by his advance guard, Frost was able to move his battalion to the south and they continued on their way. The head of the column, "A" Company was leading, reached the vicinity of the railway bridge without undue trouble. Here "C" Company with a detachment of Royal Engineers was given the job of securing this bridge while the remainder of the battalion closed on Arnhem. "C" Company's people were actually out on the middle of the railway bridge when the Germans decided it was high time to set off the prepared demolitions; with a startling roar the charges exploded and dropped the center span neatly into the river. Not a bit discomfited by this incivility, the British regained the north bank and started out to catch up with the rest of the battalion.

The countryside northwest of Arnhem where parachutists made their landing. At first everything went according to plan, with all units landing in their proper zones.



Having left "C" Company to deal with the railway bridge, the 2d Battalion continued unmolested towards Arnhem until they came under fire from a wooded hillock which the maps call Den Brink. It is situated in the bend formed by the railway line and the Utrechtsche Weg (road) and commands the western approaches to the city. "B" Company peeled off and sent in an attack against the Den Brink. An armored car firing straight down the slope into their faces caused the paratroopers heavy casualties and much unhappiness before they took the hill and made it their own and the Germans, those who were able, went away. While the fighting on the hill was snarling back and forth Frost sideslipped "A" Company towards the river, together with his battalion headquarters and the brigade headquarters which had joined him earlier that afternoon. Hugging the road that runs along the north bank of the Rhine, Frost led them into Arnhem.

Not much more than 30 minutes later "C" Company came panting along after their disappointment at the railway bridge. Eager to rejoin their parent unit and completely ignorant of the new move to the south, they bashed straight along the original planned route into the town; apparently the paratroopers consolidating the hard-won Den Brink feature were too busy to give them a moment's attention. "C" Company had reached a point on the main street not quite opposite the Pontoon Bridge when they found themselves engaged with German troops who were of a mind to prevent them from continuing on their way. One thing led to another, as it will sooner or later in these matters, and eventually the British found it prudent to retire into the Hotel Haarhuis nearby. Here they settled down with professional efficiency and took up the sombre business of selling their lives as dearly as possible. It must have been quite a good show they put up because the Germans did not succeed in completely eliminating them until almost two days later—and it wasn't for lack of trying.

The light was beginning to run out as Frost took his bobtailed force through the almost deserted streets of Arnhem. In the spooky silence of the quiet town the steel heelplates and hobnails of the troopers' heavy boots made an echoing clatter and sent little sparks flying along the pavement. They could hear the growling and bickering of a firefight that was going on somewhere beyond the town to the northwest. Once they passed a pair of stolid Dutch policemen who watched in silence as the tense, sweating men in camouflaged jumping smocks and netted steel helmets went with hunched-up shoulders through the darkening streets. There were odd lots of Germans to be dealt with from time to time, but not enough to cause the paratroopers any real trouble. It was just as well, however, that there wasn't too much resistance because at the moment the 2d Battal-

ion was minus two-thirds of its normal strength, "B" and "C" Companies being very busy with personal affairs in the vicinity of Den Brink and the Hotel Haarhuis. It was not quite 8 o'clock when Frost realized he was in sight of the steel spans of the highway bridge which crosses the lower Rhine at Arnhem. Enemy horse and motor transport was moving sedately across the bridge from the south into the town.

The 2d Battalion immediately set about establishing themselves in some buildings at the town end of the bridge. There were Germans here with automatic weapons and a sense of responsibility. It was not until the British went to work with the flamethrowers and an antitank gun that possession passed to them and their title to the property was clear.

While this excitement was going on Frost started one of "A" Company's platoons to the far end of the bridge to secure it. But the enemy there, suddenly realizing all was not well in Arnhem on that night, swept the bridge roadway with automatic cannon fire and drove the

platoon back. A message was then sent to "B" Company, licking their wounds at the Den Brink feature to the west, to cross the river by means of the Pontoon Bridge or by barges and so outflank the German position at the south end of the main bridge. However, there were no boats or barges to be found and the enemy had very thoughtfully burned the pontoons; "B" Company could not cross. Frost's people at the north end of the main bridge busied themselves improving their foothold, confident that the rest of the brigade would get to them before too long. This 2d Battalion of the 1st Parachute Brigade had done very well in their D-day efforts, but they were fated to do great things before they died in this quiet Dutch town.

What had happened to the other battalions of their brigade? Fitch's 3d Battalion moving out at the same time as Frost, but on the main Heelsum-Arnhem road, soon found themselves faced with all kinds of difficulties. Before they were an hour down their road they ran into trouble at the crossroads just south of the village of

Dispositions of the troops of the 1st Parachute Brigade around the north end of Arnhem bridge 48 hours after the initial landing. Code —A: Co A, 2d Parachute Bn; B: Co B, 2d Parachute Bn; C: 1st Parachute Brigade, Royal Army Service Corps. Signals, and Defense Platoon; D: 1st Parachute Brigade Headquarters; E: 2d Parachute Battalion Headquarters; F: Troops of Brigade and Battalion Headquarters.



Official War Office Photo



Official War Office Photo

Maj J. D. Frost, DSO, MC (in helmet), talks with LtCol J. A. Goschen, OBE, on his return from the Bruneval raid. Frost had been promoted to lieutenant colonel before the Arnhem battle and was CO, 2d Bn, 1st Parachute Brigade.

Bilderberg. The trouble was a pair of German armored cars that popped out of the Valkenberg Lane, shot up everything in sight, knocked out an antitank gun before it could go into action (it was pointing the wrong way), and then made a snappy exit to the north. While the 3d Battalion was unscrambling themselves from this unpleasant surprise they were taken under heavy and remarkably accurate mortar fire. Part of "A" Company was sent along to Bilderberg to put matters straight there since the fire seemed to be coming from that direction. The balance of Fitch's command found themselves hotly engaged in close combat with Germans who were in excellent form. Time was flying and at 5:30 that evening Fitch, concerned with the delay the enemy was imposing on him, ordered Maj Lewis to take his "C" Company, bypass this frontal resistance, and get to the bridge by any route he could. It is not quite clear to this day as to just how it was managed, but the fact remains that sometime before midnight a badly shot-up "C" Company reached the school building at the north end of the bridge and joined forces with Frost's platoon of Royal Engineers who were in residence there.

The 3d Battalion continued their best efforts to break through the Germans facing them. Enemy mortar and Nebelwerfer fire raked the area with great thoroughness; evidently there was a cleverly hidden observation post somewhere very close by and the whole place was becoming downright unhealthy. At 7:30, as darkness was coming on, Fitch withdrew his leading elements back down the road to the west and took up an all-around defensive position. A short while later they were joined by the two platoons of "A" Company who reported that the Germans had approximately one infantry battalion in strong positions covering the approaches to Bilderberg. The 3d Battalion now had some seriously wounded men on their hands and it was imperative they receive expert

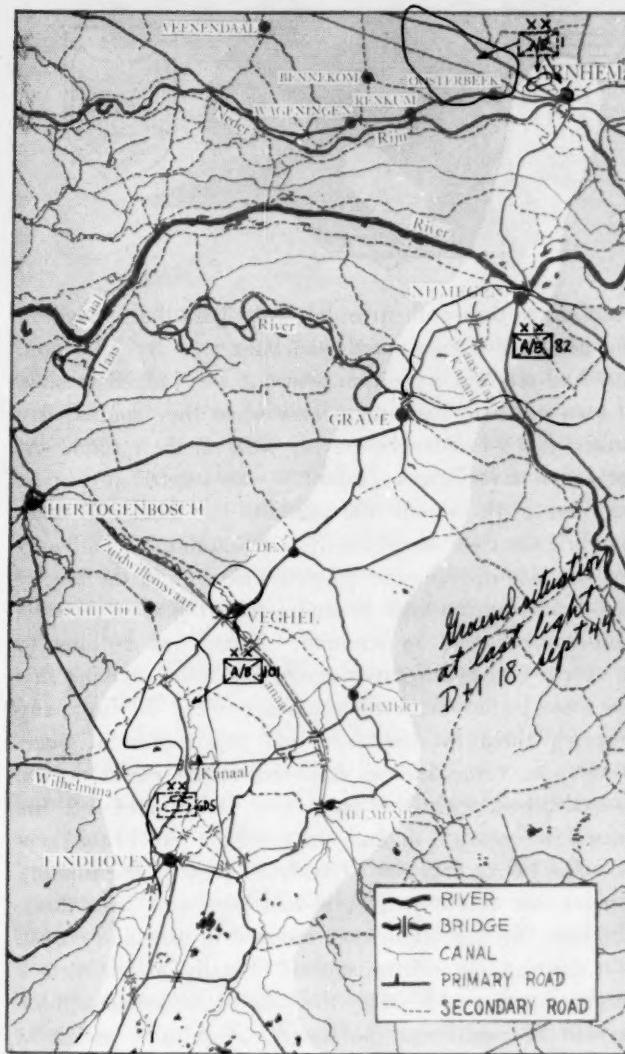
medical attention very soon if they were to be saved. But patrols sent out later the same night found the enemy had cut the road both to the west towards the drop zone, where the Brigade medical officer had set up shop, and to the east towards Arnhem; all wounded had to be kept with the battalion. Radio communications which had been bad all day failed entirely at 9:30 p.m. and an obscure situation became even foggier.

At 4:30 THE NEXT MORNING (D plus 1) Fitch successfully disengaged his 3d Battalion—less "C" Company which had been sent on alone the previous evening to reinforce Frost at the bridge—and moved southeast through the woods to Oosterbeek and the river road. There were sounds of a respectable firefight going on to the north and northwest of them, but the 3d Battalion met comparatively little resistance until they crossed the railway and came under small arms fire from the south. Eventually "B" Company, which was leading, reached a point about 300 yards west of St. Elizabeth's Hospital before being pinned down by fire from antiaircraft guns in positions on the south bank of the river, as well as from an armored car commanding the road itself. It was now 6:30 in the morning and Fitch made the unpleasant discovery that his 3d Battalion had somehow become split, for "A" Company, Headquarters Company, and three out of the four antitank guns were nowhere to be seen. The move to the southeast had begun at 4:30 in pitch darkness and somewhere the missing elements had taken a wrong turning. The radios were still temperamental and there was no way of getting in touch with the straying companies. A direct hit from an 88mm flak gun destroyed Fitch's only remaining antitank gun and it became imperative to move on. A friendly Dutch civilian passed the word that the Germans were mounting a counterattack from the town and it was headed toward the 3d Battalion's area. The paratroopers tucked themselves into some stone houses flanking the main road just west of the hospital. At nine o'clock the counterattack developed as promised and from then until four in the afternoon a German infantry battalion, supported by mortars, an armored car, and a Mk IV tank, tried energetically but unsuccessfully to pry the British out of their positions. Intermittently the radios consented to function and contact was eventually established with "A" Company and Headquarters Company, both of which had gone astray in the predawn darkness; as far as could be determined they had joined up with Dobie's 1st Battalion and at the moment were somewhere along the railway embankment a mile or so to the west. Fitch was particularly anxious to have his missing people in hand again since they had with them two Bren gun-carriers loaded with a reserve of ammunition which was badly needed at the bridge and he ordered them to rejoin as soon as

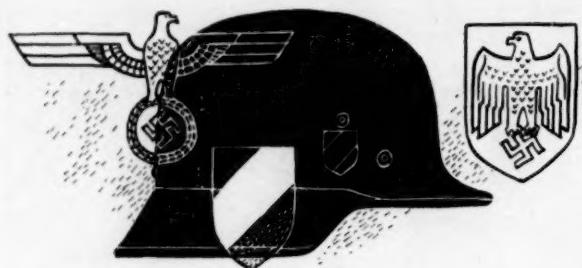
possible—and then the radios blanked out. Three hours later the communicators were again able to raise "A" Company. It was a nasty shock for Fitch to learn not only were they not across the railway line, but also that they, together with two companies of the 1st Battalion, were just about to send in an attack against the Den Brink feature which the enemy had reoccupied after Frost's "B" Company had left it the night before to find a way across the river. It was then 12:30 and the 3d Battalion waited restlessly for Maj Dennison's "A" Company and the reserve ammunition. At 2:30 in the afternoon one officer and 35 men reported to Fitch as the sole survivors of "A" Company and the Battalion Defense Platoon of the Headquarters Company. They had broken through a very strong enemy position and had paid dearly for it; Maj Dennison had been badly wounded and one of the two carriers with the reserve ammunition failed to arrive.

Plans were made to push on as soon as the ammunition could be distributed and orders issued. At four o'clock in the afternoon the 3d Battalion, now totalling between 130-140 officers and men, started forward again. The main road was under heavy fire so they angled north, intending to work their way through the gardens of the houses until they reached a railway embankment and then turn east on it, fighting their way into Arnhem along that route. Enemy mortar and machine gun fire became more intense. The Germans, artfully emplaced along the railway embankment, to the north and northwest of St. Elizabeth's Hospital, were in full command of the situation. The 3d Battalion was unable to make any progress and before dark on the evening of D plus 1 they were forced to take up defensive positions not more than 300 yards north of where they had fought all that long day.

DURING THE NIGHT of 18-19 September a patrol was sent out along the river bank to find a way which might permit the battalion to reach Frost at the bridge. This patrol, under Capt Dorrien-Smith, discovered the 3d Battalion was almost surrounded and the river bank very strongly held by well-emplaced German troops. Nevertheless, at dawn on Wednesday the 20th, Fitch's battalion, a very small battalion now, only about 100 men, battled its way to the bank of the Rhine and seized a large house known as the "Pavillion" (the Brigade intelligence report had noted that ". . . the Rijn-paviljoen is in use by the enemy . . ."). Later on some men from the 1st Battalion joined them here, but no further advance could be made from this point. The Germans had thrown a ring around three sides of the Pavillion and on the fourth side was the Rhine—wide, deep, and sullen. The 3d Battalion could not help Frost, still holding the bridge and calling for reinforcements that never came.



Dobie's 1st Battalion, the reserve of the 1st Parachute Brigade, is still to be accounted for. Because of the highly satisfactory drop and because the Dutch civilians reported few Germans in Arnhem on that Sunday afternoon the 17th of September, Brigadier Lathbury who was commanding the 1st Parachute Brigade ordered the 1st Battalion to move out at 3:30 and seize the high ground overlooking Arnhem on the north. They were to approach their objective from the northwest, guiding on the Amsterdamsche Weg. Just north of Wolfhezen (the Luftwaffe was using the lunatic asylum there as a quarter for their officers) the 1st Battalion came under fire from Germans nicely situated on the high ground overlooking the road junction. "R" Company was acting as the advance guard and in trying to break through this enemy strongpoint it was to suffer some 50% casualties. The fighting in the woods here was savage and very costly; quarter was neither given nor expected. Mindful of the need for speed, Dobie left "R" Company to handle the affair and sideslipped the rest of the



battalion to the south in order to by-pass the opposition and get back on the main road later on. By 7:00 p.m. they had reached a position where it was judged feasible to turn north to their main axis when they spotted five tanks and 15 half-tracks moving west on their road. At the same time German infantry was located preparing positions in the woods 400 yards to the front and commanding the road on which the 1st Battalion was advancing. It was obvious the balloon was up and the enemy was occupying the high ground astride the main Amsterdam-Arnhem road in strength. There was nothing to do except veer to the south again, but before making this new move Dobie sent a radio message to his "R" Company ordering them to disengage and rejoin him at once. 10:00 p.m. came and as communications could not be re-established with this company Dobie sent off his second-in-command to find out the form and bring them in. The hours dragged by with no sign of the missing company or of the party that had been sent after them. The battalion communicators sweated in vain and cursed over their radios with no success. Finally, at one o'clock on the morning of Monday the 18th of September, Dobie decided he could wait no longer. Guides were left in case "R" Company should show up and the battalion filtered off to the south with the intention of working their way through Arnhem and thus onto the high ground to the north. The move through the woods was confused and difficult; the place seemed to be full of Germans and there was much indefinite, bitter fighting. By 4:30 on Monday morning D plus 1, they reached a point just north of the Utrecht-Arnhem road where they came under accurate fire from the enemy who were astride their route and adequately supported by armored cars, 20mm guns, and mortars. It was this fight the 3d Battalion had heard to the north and northwest of them as they came out of the woods that same morning and started their run into Arnhem. After all, they were only two miles or so south of where Dobie's 1st Battalion was becoming heavily engaged. If only these two battalions could have joined forces perhaps the story might have been different, but the fact remains neither knew the other was in the neighborhood.

About an hour and a half later, it must have been towards 5:30 in the morning, the 1st Battalion's artillery liaison officer got his radio working just long enough

to hear Frost's 2d Battalion at the bridge calling urgently for artillery fire to break up a German attack that was forming. This was the first definite indication Dobie had had that the bridge or any part of it was still in British hands. He gave orders to disengage, move to the south around the resistance holding up his battalion, and get to the bridge without further delay. At 7:30 a.m. as they moved in towards the town, they picked up the 3d Battalion's Headquarters Company and "A" Company which, you will recall, had become separated from the rest of Fitch's command when he moved them through the woods the previous night. After crossing the railway embankment where it begins to curve back towards Arnhem, enemy fire began cutting into the 1st Battalion. The Germans had organized positions in houses near the road, along the railway bridge, and in a factory building very obligingly situated so as to command the 1st Battalion's line of advance. There were good German troops here, reinforced by four armored cars as well as a tank, and they were quite determined the British would not get past this point; the British were equally stubborn in their desire to get on with their work. As the paratroopers forced their way forward, the enemy's armored fighting vehicles withdrew to the Den Brink elevation which was once again in German hands. "B" Company of Frost's 2d Battalion had taken the place on the evening of D-day and then had left it when they were ordered to seize the Pontoon Bridge. The enemy, having blocked the other main roads—the Amsterdamsche Weg to the northwest and the Utrechtsche Weg to the west—was now closing off the entry from way of Oosterbeek by holding the high ground at Mariendaal and Den Brink, as well as the houses and factory covering the approaches to the south. It is probable that in the interval existing the evening before, from the time Frost's people had left the hill until the Germans had reoccupied it, Fitch's 3d Battalion had been able to slip past into Arnhem.

• **THUS IT CAME** about at 8:30 on Monday morning (D plus 1) the 1st Battalion was committed to a sharp fight along the line of the railway, after having fought and marched for over 15 hours without rest. There was no nonsense about these men and they were obstinate in their resolution to get through to the bridge and reinforce the 2d Battalion. At nine o'clock Maj Perrin-Brown's "T" Company, attacking astride the main road, refused to turn back in the face of withering fire and so gained the houses. They then put their hands to eliminating the enemy in the factory building flanking the road. At the same time "A" Company of the 3d Battalion, which had joined up with Dobie's 1st Battalion after having been lost all the night before, bore a hand with the rest of their adopted battalion in an attack against the Den

Brink. Slowly they inched their way forward, but the fighting was extraordinarily close and deadly. "T" Company, for example, which had carried out three attacks since eight o'clock that morning, was now reduced to a total of 22 men. By one o'clock the battalion penetrated the town to a point not more than four or five blocks from St. Elizabeth's Hospital when they came under heavy fire directly ahead. The Germans had the usual mortars and machine guns, as well as a special dividend in the form of an 88mm gun. Dobie's 1st Battalion at this time could not have been more than 100 yards west of where Fitch's 3d Battalion was forming up for their attack to the north, but again no contact was made.

With awful persistency the 1st Battalion fought on down the south side of the main street until they were stopped cold by German tanks commanding the roadway, as well as the fire from guns emplaced on the south of the riverbank. By five o'clock that evening the British were forced off the main road and began to work their way through the same gardens the 3d Battalion had vacated just a few hours before. An hour and a half later, along about 6:30, the radios momentarily consented to function again and Dobie intercepted a message from Frost at the bridge saying reinforcements were imperative. Dobie's 1st Battalion now numbered not more than a hundred men. They did not have strength enough for another daylight effort so plans were made for a night attack and a final desperate effort to get to the bridge.

At 8:00 p.m. Dobie was joined at St. Elizabeth's Hospital by what was left of the 2d Battalion of the South Staffordshire Regiment of the 1st Airlanding Brigade which earlier that day had been sent in to Arnhem as reinforcements for Frost. They brought with them Dobie's "R" Company, which, you remember, disappeared in the vicinity of Wolfhezen on the afternoon of the first day while trying to force a way through the Germans blocking the road, an effort which reduced them to their present strength of 22 men. Plans were firmed up for Dobie's augmented force to lay on a night attack at nine o'clock. Shortly before the jump-off, word was received from Division that the bridge had been overrun and was now in German hands. The general air of despondency at the Hospital was broken abruptly, towards midnight, when the communicators intercepted a radio message from the artillery spotter with Frost at the bridge. Not only was the bridge still in English hands, but they were at the moment engaged in beating off another German attack and urgently requesting artillery support and reinforcements. At this same time the 11th Parachute Battalion of the 4th Parachute Brigade, which had come in on the second lift on D plus 1, joined the others in the hospital. New plans were made for an



attack on the bridge and Dobie sent a runner along to Division to keep them informed of his intentions. At one o'clock the next morning (D plus 2), before the attack could get underway, Division ordered Dobie's force to withdraw to the vicinity of Hartesteen where a defensive perimeter was to be formed; an hour and a half later these orders were abruptly cancelled. Finally, at 4:00 in the morning of Tuesday the 19th of September, Dobie made his cast and the attack went in with the 1st Battalion on the right along the river bank, the South Staffs on the left on the main road—the Utrechtsche Weg—and the 11th Parachute Battalion following along in the wake of the 1st Battalion. Just after reaching the road at the riverbank near St. Elizabeth's Hospital Dobie met Capt Dorrien-Smith of the 3d Battalion, who, it will be recalled, had taken a patrol out to discover some way of getting around the enemy who had surrounded the 3d Battalion in their houses to the northwest of the hospital. Dorrien-Smith warned Dobie the riverbank was impossible because the Germans were holding it in strength. The 1st Battalion, nevertheless, continued to probe into the town in spite of the enemy who made them fight for every foot of ground. When 4:30 came the 1st Battalion was reeling under intense fire from mortars, artillery, and machine guns. There were enemy tanks and half-tracks firing into them from positions on the high ground to the left of the road along which the British were struggling to advance. With grenades and bayonets the paratroopers forced their way almost as far as the Pontoon Bridge but they were nearly done. At six o'clock they were being engaged at point-blank range by German tanks clanking through the smoky streets. The strength of the three rifle companies and battalion headquarters now totalled all of 39 men. A final desperate attempt was made to get into some houses on the high ground and when this gallant effort failed the 1st Battalion ceased to exist as a fighting unit.

It was in this way the 1st Parachute Brigade expended itself. By the morning of D plus 2 the 2d Battalion still held the north end of the great highway bridge, while the 1st and 3d Battalions disintegrated in the streets of Arnhem in their vain efforts to reinforce Frost.

Where was the rest of the 1st British Airborne Division?

To be concluded next month



International News Photos

The real beach at Tarawa, as photographed during the battle—a problem in duplication for the movie-makers.

JUST ABOUT EVERYONE IN THE NATION, AND ALMOST every man who has served in the Marine Corps, has seen such popular motion picture presentations as "Glamour Gal," "To the Shores of Iwo Jima," "Pride of Main Street," "Centerville, U.S.A.," and Motion Picture Academy Award winner—"With the Marines at Tarawa." Few, other than Public Information personnel and Photographic Services men, know the origin of the film that finally flickered on theater screens throughout the United States. There is a central library where such film is filed at the Marine Corps Motion Picture Film Archives, located at the Marine Corps Schools, Quantico, Virginia.

Physically, the section is manned by 13 men including their NCOIC, MSgt Warren Phipps, who functions as the Chief Librarian. The men in the section are charged with some of the most valuable records in the Marine Corps—a photographic history *par excellence*. They were as responsible for "With the Marines at Tarawa" winning an *Oscar* as the Hollywood studio which did the editing. They have been in the background of more Marine Corps motion pictures than any unit, except the men who actually made the films in combat.

Most of you probably saw Republic's "Sands of Iwo Jima" release. From the outset, it appeared to be principally an extravaganza filmed on vast Hollywood sound stages with little thought about technical military excellence. Let's back-track a little. Republic Pictures realized the tremendous task with which they were confronted. A great number of scenes would of necessity have to be filmed in the United States and still retain a certain warlike quality. Republic moved their entire production unit to Camp Pendleton, made a mock-up of the beach at Tarawa, and filmed their footage with that as a set. The result was so exact that the mock-up is used now in training at Pendleton. To make the film even better, their cameramen filmed the picture so that their own scenes could be augmented by combat scenes and still be of equal exposure quality. The result was splendid continuity of scene quality.

It was a job well done, a tribute to Marine Corps motion picture cameramen of World War II, and proved conclusively that Hollywood's expert cinematographers could not have made the movie without the Marine Corps Motion Picture Film Archives.

The Corps' Film Archives

Currently, the March of Time staff is busy preparing a sequel to "Crusade In Europe" for the Air Force, a portion of which will include Marine Corps film. R. K. O. is completing "Flying Leathernecks," a technicolor film about Marine aviation in World War II and Korea. 20th Century Fox has already distributed "The Halls of Montezuma."

The Archives is guided from Headquarters, U. S. Marine Corps, by Maj William A. Harper, photographic officer for the Corps. Organizationally, the Archives is divided into two sections—the Archives itself, and a classification sub-section.

The Archives Section handles all shipping and receiving of film, film checking, leadering and canning reels, scene locating, and film identifying. The Classification Section takes care of screening, transcribing scene-by-scene commentary, cross-indexing every scene, and filing cards for each scene. Essentially, it is a highly-integrated process geared to minimize difficulty in locating every inch of footage about the Marine Corps.

The Archives building contains nine air-conditioned vaults which maintain a constant temperature so that the film will not deteriorate, and each vault is alphabetically lettered to facilitate easier filing.

Each vault has a capacity of 1300 cans of 35mm film and 3360 cans of 16mm motion picture film. In all, the vaults have a total of approximately 15,000,000 feet of

By Cpl Lawrence M. Ashman

film on file in Kodachrome and black and white originals, dupes and negatives.

The film is of inestimable value to the Nation. It chronicles the development of the Marine Corps and dates back to World War I vintage. Today, the Archives draws its chief supply of productions from the West Coast Motion Picture Production unit at Camp Pendleton, and the East Coast unit at Quantico.

Standard procedures have been adopted by the Motion Picture Film Archives to meet demands by outside requests for specific scenes for forthcoming Hollywood

productions. Specially assigned men in the section have 380 major subjects and 3180 minor subjects by

which they gauge every scene on file. Scenes range from a Marine sipping coffee on the front lines to a Marine Corps fighter plane diving at a Nip bomber high in the clouds over Okinawa.

Let's follow a reel of 16mm film from the time it arrives until it's on the way out to fill a request from Hollywood. Any day of the week, a 400-foot reel of film arrives at the Archives Section from one of the units on either coast. After it is unpacked, the film is checked for proper labels, is canned, and temporarily placed in a vault to await classification.

When its turn comes, the reel is removed from the vault to be screened by a film checker, who pulls both

Republic Pictures' mock-up of the same scene at Tarawa, although not exact in detail, caught much of the realism.



the negative and print from the vault, and checks them both against a censorship report which accompanied the film. After the film checker is satisfied with his screening, he sends the print to Classification for another screening and classifying.

The Classification screener checks every scene on the reel, recording a scene-by-scene commentary on a dictaphone cylinder. After he completes his analysis, he returns the film to Archives, where it is leadered and canned for the vaults.

Meanwhile, a transcriber-typist converts the verbal scene report to a rough censorship report, which is then analyzed in every detail by a man experienced in cross-referencing. The censorship report is broken down into every applicable major and minor subject classification, and a ditto stencil master is typed. A 400-foot reel of 16mm film has an average of 35 sets of cards, so you can see at this point that it is pretty difficult to miss locating scenes with such a highly integrated card-index system.

There's one final indexing operation performed by the cross-referencing desk, which is perhaps the most important of all indexing, and that is "arrowing" the stenciled cards. Each major subject listed on the card has an arrow stamped next to it, corresponding to related scenes. Arrowing assists in file distribution and further facilitates the location of scenes at a later date.

What happens to film when a request is received from a Hollywood studio can best be illustrated by taking an actual request, in this case Republic's, for Iwo Jima film.

Out of a total of 1,633,500 feet of film about World War II, Republic borrowed a little over 296,000 feet for their editors to screen. When the final print of

Film checker compares negative and print with censorship report, then sends print to classification screener.



The classification screener records commentary on a dictaphone cylinder to accompany each scene classified.

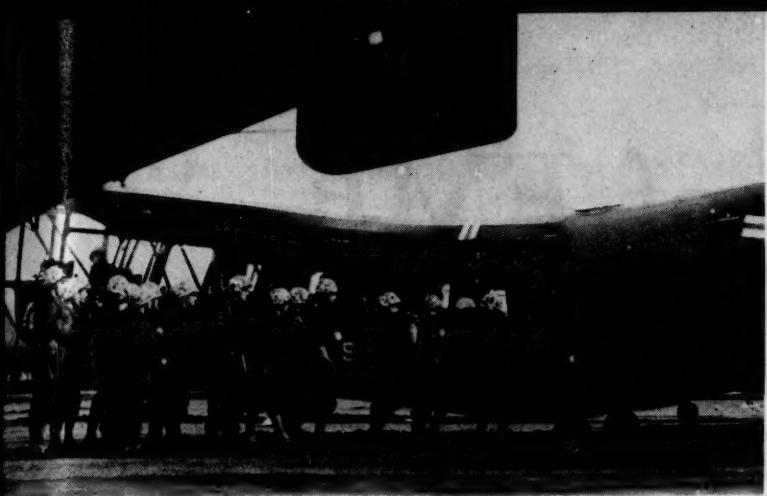
"Sands of Iwo Jima" flashed on screens throughout the Nation, 3,000 feet had been incorporated in the movie.

Initially, a letter was received by 1st Lt Carlos P. Steele at HQMC requesting assistance. Then a Republic Pictures producer, accompanied by his location manager, flew to Quantico from Hollywood, checked censorship reports, and screened potential scenes. Dups which they selected were shipped to the studio in California where a final selection was made by the film editors, who later requested the original footage so that they could make 35mm blow-ups from the Kodachrome. When the film returned from Hollywood, the Archives gave it another check and returned it to its original place in the vaults ready for future use.

For the first time since the war, the Marine Corps is again making its own training films about subjects particular to Marines. In addition, the Corps still produces occasional public release features and television releases, for which some 75,000 feet of specially selected film has been set aside.

Admittedly, the Marine Corps Motion Picture Film Archives is only a small unit, compared with those of other branches of the Armed Forces. But the Corps' Archives has an incomparable record which future Marine tacticians can check back on to see how Marines of another generation performed on the battle front. Every foot of the film can be used as a training adjunct to work in the field because it documents amphibious techniques under war conditions and can be used as a basis for re-designing invasion tactics in the future. Historians already view the film as an important part of United States history.

US MC



Amphibious Graduation Problem

Practical experience in applying tactical principles and techniques was afforded two graduating groups at the Marine Corps Schools, Quantico, Va., in a 48-hour amphibious landing and field exercise, which started on 28 February. Students of the 7th Basic and 3d Special Basic Classes were formed into a battalion landing team in a small-scale landing operation and into a reinforced battalion in the realistic field exercise which followed the landing. Also included was a night amphibious reconnaissance of the landing beach by a platoon in rubber boats.

The landing and field exercise were designed to give the students practical experience in actually doing many of the things they had been taught. In order to make the field exercise realistic, opposition was furnished by a reinforced rifle company of Schools Troops personnel, two divisions of aircraft, and constructive artillery.

The student battalion landing team was reinforced by a 105mm howitzer battery, a tank platoon, an engineer platoon, a battalion tactical air control party, a medical detachment, a motor transport platoon, and two divisions of aircraft.

Student officers were shifted into various leader assignments according to a planned rotation system and by filling vacancies caused by simulated casualties.



ABOVE: Student officers of the 7th Basic and 3d Special Basic Courses land by helicopter in "enemy's" rear in order to cut supply lines.



Exercise held recently at the Marine Corps Schools included amphibious landing, march to exercise area, and battalion in attack problem.

The Genesis of FMF Doctrine: 1879-1899

By W. H. Russell

PART I

"... well-established principles . . ."

A fleet marine force is defined as a balanced force of land, air, and service elements of the U. S. Marine Corps which is integral with the U. S. Pacific and/or Atlantic Fleet. It has the status of a full type command and is organized, trained, and equipped for the seizure or defense of advanced naval bases and for the conduct of limited amphibious or land operations essential to the prosecution of a naval campaign.



Ed: With this article, the GAZETTE begins a series on the early beginnings of what we know now as the Fleet Marine Force. The material contained in this series antedates that of Chapter II of the new Crowl-Isley book, "The U. S. Marines and Amphibious War." (See Back Cover, this issue).

THOSE WORDS ARE SO LOGICAL, AND SO MUCH A PART of the nation's military doctrine, that they must shock anyone who can remember the years before 1933. For then there was no Fleet Marine Force.

What did we have before 1933? Were American forces experienced in amphibious work? Had they worked out amphibious doctrine for emergency use? Was amphibious assault a Marine Corps specialty? Did the Corps have trained units to apply the doctrine promptly and with vigor?

Each time, the answer is a cautious, "Yes-but . . ." and it is the *but* factor in every answer that makes this a long story. Each *but* factor marks a separate chapter in the growth of amphibious doctrine.

When he created the FMF in 1933, Gen John H. Russell, Jr., forged each separate strand of independent development into a single effective instrument. Then in 10 crowded years the FMF wove mature amphibious doctrine from 100 years' constructive trial and error.

The wonder is not that it took until 1933 to evolve the FMF, but rather that we found so quickly the answer to a problem that has plagued military men since the dawn of history.

Fundamentals

AMPHIBIOUS OPERATIONS are as ancient as warfare. Yet systematic amphibious doctrine is scarcely 200 years old, and its orderly development in the United States began little more than 100 years ago. Tracing the story is complicated by changes in terminology that only recently produced the term *amphibious*. Clausewitz did not use it. As the philosopher of land warfare, he dismissed amphibious concepts in a few paragraphs. Jomini called amphibious operations *descents*, and covered them in a chapter that merely scratched their surface. Capt Alfred Thayer Mahan, USN, was the first philosopher of war to discuss amphibious operations seriously, though he termed them *maritime expeditions*.

Mahan was a boy during the Mexican War when American naval forces first applied steam and the screw propeller to a large amphibious problem. He attended the

What existed before the origin of our FMF in 1933? Since the beginning of warfare men have practiced forms of amphibious operations. Yet its systematic doctrine is scarcely 200 years old and its development in the U. S. began to take form only a century ago

Naval Academy, or later served, with naval officers, both Navy and Marine Corps, who laid foundations on which today's FMF doctrines rest. In his mature years A. T. Mahan furnished background for systematic study by analyzing amphibious doctrine as it had stood in 1815, the year Robert Fulton launched the first armored, steam-driven battleship.

After long study of naval operations between 1660 and 1815, Mahan laid down the fundamental principles of amphibious warfare; principles because they apply in all ages, fundamental because they reflected the state of amphibious development at the advent of steam, the screw propeller, and the rifled gun.

Capt Mahan's basic amphibious axiom emphasizes the exclusively offensive nature of the operation. Even when the object be defense, he said, amphibious tactics must be offensive; fleet and logistic support must be unwavering. His second axiom provides that, in order to succeed amphibiously, a nation *must* have a secure frontier and *must* control the seas where it proposes to operate. The third axiom is common to all offensive operations; the strategic planner must select a base, a line of operations, and an objective.

Then Mahan took up the question of assault troops; should they accompany the offensive fleet, or should they wait at the base until the fleet wins full control of the line of operations? He concluded that if the objective is close to the base of operation (for instance, across the English Channel), troops should not be exposed until local sea control is assured. But if the base be far from the objective (for instance, the distance of Hawaii from any point in the western Pacific), assault troops must accompany a fleet seeking local sea control. If they do not, Mahan warned, so much time elapses that even successful action is wasted.

Mahan's injunction to the fleet commander is emphatic. He *must* spend ships to protect the assault force. Once embarked, Mahan wrote, protecting that assault element is the sole mission of accompanying naval units. No diversion of force is justified if it could endanger those precious troops. As Mahan expressed it, the fleet commander's problem is entirely tactical until the landing force has a firm beachhead. From then until the amphibious operation ends, support of the troops is the *only* fleet mission. Capt Mahan's emphasis on that point was fully justified in the Saipan operation (June 1944), and by developments in Korea.

Mahan deliberately concentrated on the fleet side of

the problem, and did not delve into the question of assault tactics. He was content to emphasize the offensive nature of the entire operation, and establish the fleet role in coordinated assault. As to the definition of the concept we now call *amphibious*, Mahan said,

. . . The crossing of the sea is simply a much magnified instance of crossing a stream. . . accompanying troops should be proportioned only to that immediate work, of holding a position till reinforced. . .

Notice that Mahan used "reinforced" in a general rather than the specific sense of the word. He meant "holding a position till" assault forces are relieved by land-based units.

Gen H. M. Smith, USMC, must have studied Mahan. In his *Amphibious Tactics* (See GAZETTE, June 1946), Smith wrote,

Any landing operation directly related with combat, in which forces participating operate both in the water and on the shore, must be termed amphibious and tactical. It may be a simple river crossing conducted merely in the presence of the enemy and in anticipation of battle soon to be joined.

Having accepted Mahan's statement of basic axioms as they existed in 1815, Gen Smith went beyond Mahan by

Mr Russell is a graduate of Haverford College and did two years' graduate work in history at Harvard University. Before the war, he taught for several years and then worked as editor and business manager for a firm that published weekly newspapers. He entered the Naval Reserve early in 1942, serving throughout the war as personnel officer in schools operated by BuAer. Since mid-1946, Mr Russell has been a civilian member of the Department of English, History, and Government at the U. S. Naval Academy. The four articles in this series are based on research pursued during summer vacations since 1947.



considering in detail the factors that influenced landing force development during the 100 years prior to 1945. Of them he said,

...Advances in the field of offensive tactics are limited largely to technical developments, new methods, and logistical skill which increase mobility and fire power; the fundamental axioms do not change. It is the actual application of well-established principles in the organization and employment of amphibious forces, armed with modern weapons and equipment, that is new.

Smith clearly recognized the value of those countless 19th century experiments that produced "technical developments, new methods, and logistical skills. . ." He must have seen how each apparently isolated effort merged into the main stream of FMF evolution; for he said,

Tactics governing an opposed landing for the seizure of a small advanced base to facilitate or exploit a naval campaign are equally valid for undertakings of greater magnitude, incident to invasion and extensive land warfare. The basic problems are constant, regardless of scope, purpose, or varying local conditions which may obtain.

. . . However, in its most literal and modern connotations, amphibious tactics . . . means the art of conducting an operation involving the coordinated employment of military and naval forces dispatched by sea for an assault landing on a hostile shore.

The most significant words. . . are "coordinated" and "assault." In them is the key to the development of modern amphibious tactics.

But fundamental principles are little more than mere abstract theory. Translating them to doctrine in the face of technological change was the real problem; for it is a commonplace of history that, whenever military men develop teamwork, a new weapon or method breaks it up. Then comes the struggle to adapt the familiar organization to new conditions. So it was with the coordinated assault landing.

In the later days of sail, seamen and the Marines easily divided shipboard responsibility. Sailors handled motive power (that is, rigging and sails) and maintained the ship. In battle, their gun crews and boarding parties provided the offensive punch. The Marine served as ship's police, and stood all security watches. During combat he was a rifleman whose shoulder piece outranged all other weapons in the classic naval melee. From fighting



The advent of steam in the U. S. Navy helped to destroy the customary sailor-Marine relationship. Marines no longer took their places as sharpshooters in the tops.

tops he picked off enemy officers and gunners. On deck he repelled enemy boarders, gave fire support to sailor boarding parties, and provided the extra courage a few men get from having a bayonet close behind them. Routine duty was administrative. In battle his mission was defensive. Only the high polish of Marine Corps discipline added lustre to his role.

Technological development in the 50 years between 1840 and 1890 destroyed the customary sailor-Marine relationship. Steam gave such mobility that vessels no longer fought at spitting distance. Rifled guns made the ship an effective instrument beyond the range of shoulder weapons. Napoleon's new corps of all arms had given infantry a new flexibility and power. And the screw propeller spawned small craft to carry large landing parties around forts that immobilized heavy ships.

By 1890 the battleship had emerged as a highly mobile platform for heavy guns. Its crew was no longer the homogenous band that handled any job from truck to keelson. In steam, the black gang was responsible for motive power and the deck seaman became a naval gunner with mere housekeeping duties when not in combat. Under sail, the line officer spent busy watches setting up rigging or trimming sail. In the early days of steam he had little to do but walk a deck.

Alert line officers quickly saw that the new infantry doctrine and steam launches gave added power to a fleet that could project its landing party ashore for work beyond the capacity of naval guns. It was human that some among them tried to solve the new problem by old methods; that is, by adapting the deck seamen to this new offensive mission. Only the far-sighted deck officer saw that, come full development of the battleship, gunnery

would absorb all of his offensive energy. It was only after 50 years of constructive trial and error, marked by bitter controversy, that clear heads prevailed.

Finally in 1899, Congress recognized the Navy's new specialty by merging engineer and line corps. Thus the Navy line officer got back what was rightfully his; full responsibility for the entire ship, hull, motive power, and guns. By fortunate accident, a different line of progress had produced, in the Guantanamo Marine Battalion of 1898, an instrument for offensive work ashore.

Yet those transitions were not easy. Other nations facing the same problem failed to reach a sound solution. In France a separate corps took over naval gunnery. French amphibious doctrine never fully recovered from its bitter Korean failure in 1866. British Marines were subordinated to the Navy line, and the Dardanelles defeat in 1915 demonstrated the bankruptcy of an amphibious doctrine that dominated the 19th century. Japan evolved separate naval and assault forces that cooperated in Korea in 1894, but failed in World War II after the Singapore campaign. Germany showed flashes of amphibious skill in the 19th century, yet her Army-dominated high command failed to coordinate the elements of an assault on England in 1940.

In the face of these failures by other nations, our unique success at coordinating the amphibious assault stems from the fact that it has always been correct to apply the term *naval* to both Navy and Marine forces serving the United States. Like spirited horses loosely harnessed, the Navy-Marine partnership has bred its share of competitive contention. Yet, more than anything else, the cooperation it imposed is responsible for that professional respect underlying our successful naval coordination; coordination that is essential when a balanced land force is integral with the fleet.

American individualism has made our controversies constructive. In countless instances both Navy and Marine officers have supported amphibious doctrines that were

radical to the point of heresy. But it is our pattern that one generation's heresy is another's conservatism. And when all the cards were down, the basic unity of naval partnership healed the wounds of contention.

Col George Richards, USMC, whose career spanned the fundamental controversy, expressed the idea clearly in 1913 when he wrote, "We are all of us naval officers and can meet the issue on a common ground." Because Col Richards' naval generation met the issue on a common ground, we got the FMF. And the same feeling persists today. While I was working on these articles, a casual remark implied that the Navy and Marine Corps are separate services. A Marine (who was active in that vigorous postwar "discussion" of the Marine Corps mission) very firmly set me straight, in almost the same words Col Richards used.

These, then, are the fundamental principles. Applying them to our amphibious problems has never been easy, nor is the process yet complete. It was not until 40 years after the Declaration of Independence that the United States won secure frontiers. A full 100 years after adopting the Constitution, we attained an offensive naval force that could control seaborne lines of communication. Eight years later our strategists first used the flexible land component that is the cutting instrument of coordinated amphibious assault. Since 1899, our Navy and its Marine Corps have been partners in amphibious development. And now, after 100 years of steady growth, we are finally perfecting a doctrine for coordinating ships and assault forces.

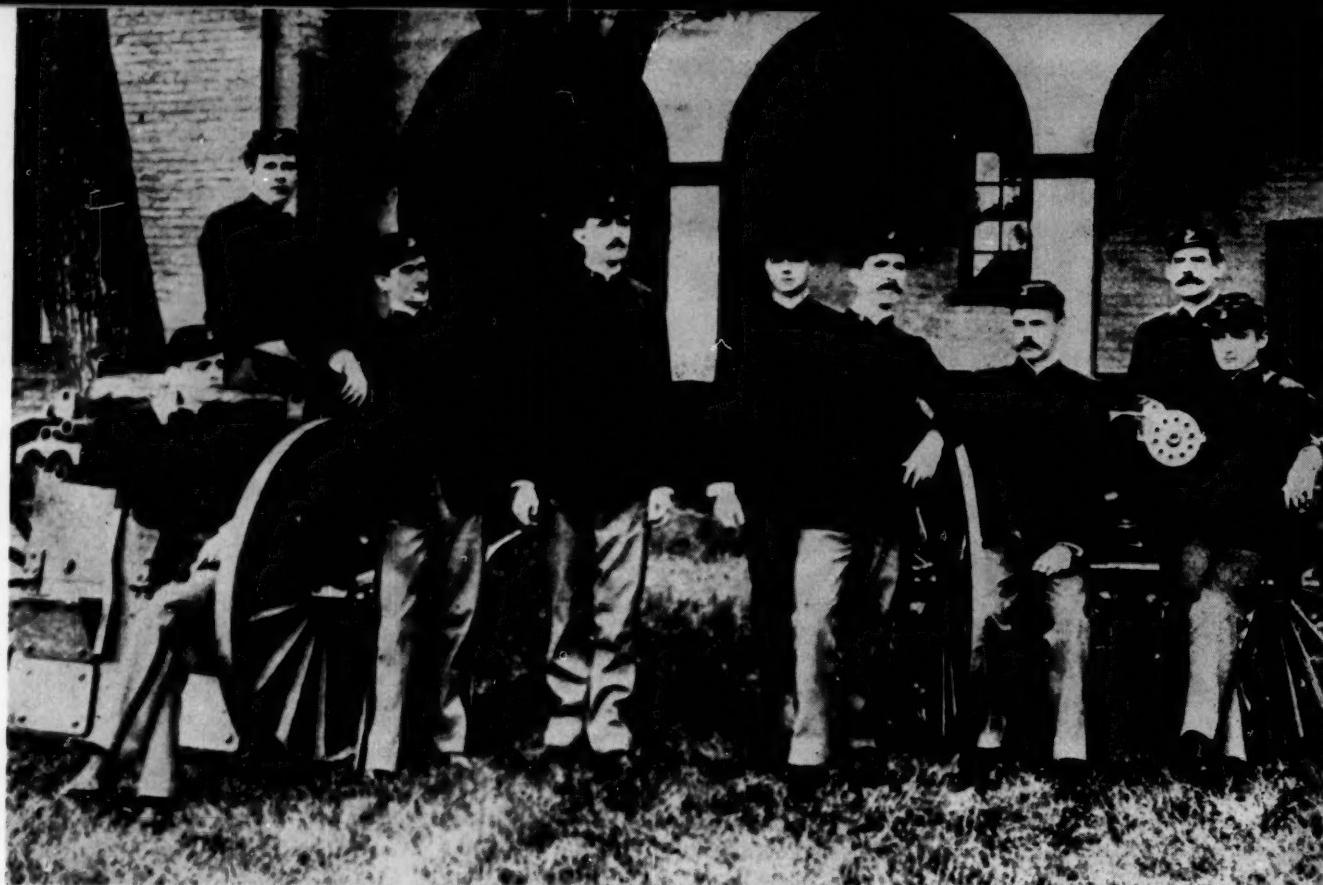
Forging the Instrument

THE MARINE CORPS has always attracted rugged individualists, but it took a technological revolution to produce the first Marine heretics.

By 1861 aggressive Marine youngsters of the 1830s and 40s were conservative veterans; bewildered by rapid change, and unwilling to mix in the rough and tumble



Col Robert W. Huntington (arrow) and the officers of his battalion, which became famous after landing at Guantanamo Bay, Cuba, in 1898. The actions of this unit prompted Adm Dewey to remark later that had he had a force of 2,000 Marines, he could have forced the surrender of the Spanish army and occupied Manila with comparative ease.



The Class of 1894 of the School of Application poses with weapons of the period at Marine Barracks, Washington.

of militia politics. Six years after our Civil War, every Marine field officer, except the junior major, was a Mexican War veteran. Neither senior captain nor senior first lieutenant had been promoted since 1861. The Corps was reduced in size, and appropriations no longer permitted authorized strength. Marines ashore were quartered in rotting hulks, or the swaggiest corners of Navy Yards. Morale was sinking. Desertion became prevalent. Yet despite such conditions, the Commandant persistently reported that "personal appearance, equipment and drills of the men were . . . all that could be desired. . . . The barracks . . . were also found in their usual good condition. . . ." When some Navy officers before a Congressional committee recommended abolition of the Marine Staff Corps, he limited protest to "my earnest dissent."

In that crisis, company officers provided leadership. In 1870 Capt McLane Tilton (of the Civil War generation), and 2dLt George C. Reid served on a Navy board that provided a much needed magazine rifle. The next year Capt Tilton and his Marine company led the van of our Navy's successful police mission in Korea. His report reflects an early example of adapting drill-book tactics to field conditions. His examination of the battle ground produced recommendations that improved the new rifle's ammunition more than 50 per cent.

In the early 1870s, 1stLt Henry Clay Cochrane (also a mere Civil War veteran) sparked the movement that induced Congress to approve reforms. The Corps got

more aggressive leadership, and new blood. During the late 1870s and early 80s, officers like 2dLt L. W. T. Waller were commissioned from civil life. From 1883 until 1898 second lieutenants came from graduates of the Naval Academy; a policy that brought in Charles H. Lauchheimer, Lincoln Karmany, Charles A. Doyen, George Barnett, Joseph Pendleton, John A. Lejeune, Ben H. Fuller, Albertus W. Catlin, Wendell C. Neville, Dion Williams, John T. Myers, John H. Russell, Jr., and many others. At the outbreak of the Spanish War 55 per cent of the Marine officers drawn from the Academy held a higher class standing than William S. Simms, who stood 33 out of 62.

AFTER 1876 there was steady improvement. Col Commandant Charles G. McCawley devoted persistent effort to "more systematic instruction of officers and non-commissioned officers in tactics and other duties. . . ." Living conditions for enlisted men grew steadily better, discipline improved, and there was marked attention to accountability. By the time Charles Heywood became Col Commandant in 1891, dawn of the golden age was at hand.

Heywood immediately established the School of Application at Marine Barracks, Washington, for noncommissioned officers or privates who were noncom material. Capt D. Pratt Mannix was commanding officer and 1stLt Thomas C. Prince the lone instructor during that first

year. Mayne's *Infantry Fire Tactics* and Batchelor's *Infantry Fire, Its Use in Battle* were basic manuals. The curriculum included field exercises that stressed combat tactics, entrenchment and tactical security, as well as the use of Gatling and Hotchkiss guns to support infantry. In addition, there was instruction in small arms, torpedoes, high explosives, and the use of steam launches; plus indoctrination in administrative duties afloat and with the naval brigade.

It is clear that the school aimed at continuous tactical instruction on a rotating basis that would eventually include all noncoms. Its short-range goal was a trained cadre to form the nucleus of any provisional battalion called for emergency duty.

In 1891 Heywood asked Congress to extend to the Corps a recent promotion law that made professional examination of all Army officers a prerequisite for promotion. Congress acted on his request the following year, and extended the act to the Navy as well.

During the 1880s and '90s there was also evidence of broadening interest. In 1881 1stLt Mannix began a two-year leave for service with the Chinese government. In 1887 1stLt Samuel Mercer and 2dLt Lauchheimer were assigned to Newport during the second term of the Naval War College. Col William B. Remey retired in 1892 after 14 years as the Navy's Judge Advocate General.

The following year, 1stLt Lincoln Karmany, a small-arms expert, began three years' duty in the Office of Naval Intelligence. Capt W. S. Muse had submitted a detailed intelligence report covering the key battle in a Chilian revolution he observed while commanding fleet Marines sent ashore to protect Americans. It was published in the Naval Institute *Proceedings* during 1894. The same year Capt Richard Wallach joined the Naval War College Staff. As one assignment there, he lectured on the war then in progress between China and Japan; a struggle for Korea that Capt George F. Elliott witnessed at first hand.

Capt Elliott (later Commandant) understood what Japan was doing in Korea much more clearly than did most military men of his day. And he saw more keenly than many in our own time how Port Arthur is the strategic key to the Korean peninsula. A few Japanese must have recognized its importance in 1894, for Elliott's report to the Commandant describes an amphibious campaign that satisfied every basic principle later established by Mahan and Smith.

The campaign opened when China sent 2,000 men to quell a Korean civil war. Japan countered with an amphibious landing at Seoul. Elliott laid particular stress on the special landing craft that set ashore, "without noise or confusion of any kind," Japanese troops, "beautifully equipped in all necessities for field service."

The Vera Cruz expedition in 1914 included many of the pioneers in the field of amphibious warfare. Left to right: Capt F. H. Delario; SgtMaj John H. Quick; LtCol W. C. Neville; Col John A. Lejeune; Maj Smedley D. Butler.





Capt George F. Elliott (later Commandant) witnessed the classic amphibious campaign in Korea in 1894, when the Japanese landed near Seoul in special landing craft. He noted the Japanese balanced force concept of operations.

The balanced force of infantry, artillery, and cavalry quickly drove China's smaller army into Korea's northern tip.

Chinese troops, representing the great nation attacked by a brash newcomer, set up a perimeter defense at Pingyang on the Yalu River, and waited for reinforcement. Warships based at Port Arthur (for all practical purposes, at the mouth of the Yalu) protected a water line of communications that ran from a base in China, across the Yellow Sea, and up the Yalu to the advance base at Pingyang. As long as her seaborne supply line stayed open, China seriously threatened Japan's Korean force.

The aggressive Japanese fleet acted promptly. Superior leadership and gunnery overcame heavier Chinese guns in the Battle of the Yalu. Though the battle was tactically indecisive, China's fleet was so crippled that it yielded local sea control. And that was all Japan needed. Her Navy convoyed a second amphibious force that landed 25 miles in the rear of Port Arthur, and promptly foreshadowed the Singapore campaign. Once Japan had Port Arthur, she held firm control of both the Yellow Sea and the Yalu; the Chinese at Pingyang withered on the vine.

The United States was soon to face a similar campaign.

When it came the Marines would be ready. Maj George C. Reid, Adjutant and Inspector since 1894, had the logistic staff at a high pitch. The Philadelphia Depot of Supplies functioned so smoothly under Capt Prince that Mr John McAllister turned out 1,000 newly designed

uniforms in the first three weeks of the Cuban emergency. In fact, the Corps had acquired a reputation for such fire-department reaction to emergencies. In 1885 two provisional battalions, drawn from shore stations, assembled promptly for expeditionary duty in Panama. In 1892 a similar provisional battalion, called to police the cholera quarantine camp on Sandy Hook, assembled there within 24 hours after the orders left Washington. And in 1897 the Chief of BuNav endorsed a hurry call from Alaska for Marines to police the Yukon River after the gold rush drew "many unruly characters there."

When the Cuban crisis finally broke, LtCol R. W. Huntington's battalion assembled in New York before a transport could be got ready. After brief training at Key West, it made Adm Sampson's fleet a "fleet that came to stay."

If Capt Elliott heard rumors of our Army's Cuban landing at Daiquiri, he must have realized how much better the Japanese Army and the U. S. Marines did such things.

Early Amphibious Doctrine

• FIFTEEN YEARS before Capt Elliott witnessed the classic amphibious campaign for Korea, a group of Navy officers began the systematic study of amphibious doctrine. As so frequently happens, dramatic events in recent years blind us to the real progress they made before 1890. Their interest sprang from the threat of Caribbean

While acting Commandant, MajGen John H. Russell suspended activities at the Marine Corps Schools in order to write the first "book" for amphibious warfare. He saw to it that the new FMF learned from the "book."



war in the 1870s, when Spain's Cuban squadron was more heavily manned than our entire fleet. The study took the form of articles, accompanied by critical comment, published in the Naval Institute *Proceedings*, the professional forum of the day.

In the 10 years after 1879, Lt T. B. M. Mason, Cmdr A. T. Mahan, LtCmdr A. D. Brown, Lts C. T. Hutchins, C. G. Calkins and Dennis H. Mahan (A. T. Mahan's younger brother), Ensign William L. Rodgers (later Vice Adm and naval historian), and many others contributed to the running discussion. They produced sound doctrine, only to see it swallowed up during the 1890's by the great controversy over which naval branch should conduct the amphibious operation. Yet their work was not entirely lost.



Commandant Thomas Holcomb started with an FMF of two brigades of 1500 men each in 1936, and built its strength (by 1943) to three divisions, 95 aviation squadrons, and 15 defense battalions, truly a balanced amphibious force.

The Naval War College and North Atlantic Squadron tested elements of this 19th Century doctrine with small exercises in 1887, 1894, 1895, and 1897. The Guantanamo landing in 1898 proved its basic soundness, and Adm Dewey reinforced that finding by stating that he could have forestalled the Philippine insurrection if there had been 5,000 Marines integral with his fleet. Early in the new century, Maj Dion Williams acknowledged the 19th Century work in the *Proceedings* and at the War College as the foundation of early amphibious studies by Marine officers.

Ever since 1898, amphibious doctrine has developed steadily as a Marine Corps specialty. From 1900 to 1904, while Col George C. Reid was a key member of the



"Back in 1905 . . . Capt John H. Russell had indoctrinated a fresh-caught second lieutenant named H. M. Smith." Above, LtGen H. M. Smith and Col D. S. Brown observe operations at Iwo, where amphibious training paid off.

Navy's first General Board, there were regular fleet exercises that included amphibious landings by specially trained marine units. After 1904 attention shifted to logistic support; a development reflected by the establishment of the Advance Base School in 1910. The Vera Cruz expedition of 1914 is typical of the countless Central American missions that permitted a whole generation of Marines to adapt drill-book tactics to jungle fighting against an enemy with a lower standard of living; experience that paid off handsomely at Guadalcanal, and in Korea.

These two threads, logistic and tactical, drew together after Britain's Dardanelles failure in 1915. Col John A. Lejeune and Maj John H. Russell built on their own field experience (as well as on training at the Navy War College, the Army War College, or the ONI) to draw from the defeat lessons that contributed to amphibious work after World War I.

It was no accident that amphibious training gained impetus while Lejeune was Commandant; no accident that the Fleet Marine Force was established immediately after Russell became Commandant. And it was some kind of poetic justice that MajGen Thomas Holcomb, Russell's successor, chose Col H. M. Smith to direct amphibious training in 1937.

Back in 1905, 32 years earlier, Capt John H. Russell had indoctrinated a fresh-caught second lieutenant named H. M. Smith.

To be continued

You WILL NOT FIND ANY DESCRIPTION OF AN MOS for a railroader in the MOS Manual. However, MOS or not, along with the expansion of the Marine Corps and more frequent movements of Marine units by rail, you may find yourself in charge of a troop train whether you are a field or company grade officer.

The planning for such a movement starts well before the conductor calls "board" and you are satisfied all your personnel are embarked. The first step is to figure the passenger and baggage requirements. This is ac-

complished on standard forms and submitted to the G-4 or Supply Officer. It's up to the G-4, through the railroad representative, to obtain the proper equipment at the right time and place; there are usually changes so keep the planning and execution flexible.

After the requirements have been submitted for equipment, considerable additional planning must be accomplished. Based on the type and capacity of the cars, rosters of personnel for each car must be drawn up; it's important to have an officer or senior NCO in charge of each car. Plans for staging and loading of baggage must be made. An officer with previous experience will be good insurance that the baggage car will be loaded properly. Considerable thought should be given to the messing of the men, whether it be dining car, kitchen car, or box lunches. In some movements meal chits have worked out well to prevent the "chow hound" from eating two or three meals.

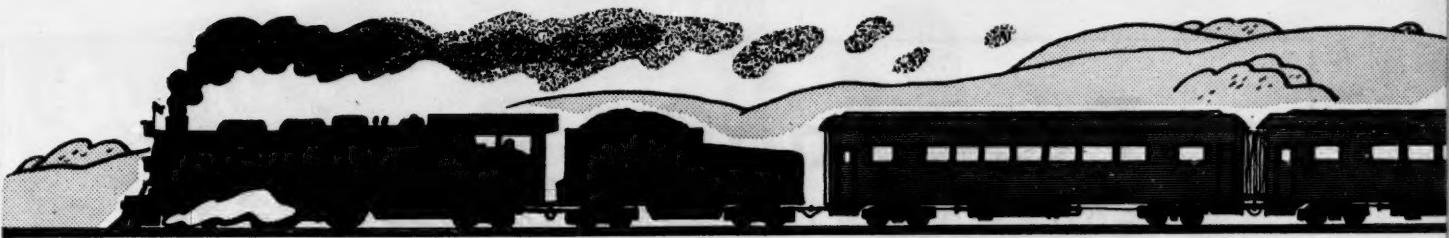
The train commander, prior to departure, must obtain his transportation requests from the supply officer; this includes railroad tickets, Pullman and meal requests. It's worth while to check these carefully and follow the instructions; if you make an error you may receive a fat checkage from the government three or four months

later. Along with these are certain forms, NAVMC 943-QM, which must be submitted to Headquarters Marine Corps on the completion of the movement.

The uniform for the movement will of course vary with the circumstances, but utility is probably the most

By LtCol Charles L. Banks





practical for long trips. Space is fairly limited on passenger cars and baggage should be kept to a minimum.

On the day of the movement, be prepared for a change in time of departure because it's usually the rule, not the exception. Despite the fact that every railroader carries a Hamilton pocket watch you may have to feed an extra meal at the barracks because the ETD was later than planned.

If practicable, baggage cars should be spotted ahead of time so they can be loaded and sealed prior to the arrival of the passenger cars. As soon as the passenger cars arrive, the train commander with his car commanders should inspect the train and cars with the railroad conductor or Pullman conductor, depending on the type of equipment. This is very important, and all discrepancies should be carefully noted. The car commander and conductor should then sign mimeographed sheets for each car, all stating the condition of the car inspected. This inspection is made prior to the time troops embark. In addition to the conductor, there is usually a passenger representative aboard to assist you in anyway he can; he is the liaison man between you and the railroad. The conductor will also be of assistance, but much of his time is required in the execution of his regular duties.

Loading should be done by car team—and if facilities permit should be done simultaneously. Men should be briefed on what car they are in prior to the loading. Also prior to or immediately after loading, the car commander should hold school on the conduct of personnel aboard the train; the main points are covered in Article 8301, Marine Corps Manual.

As soon as practicable have a talk with the conductor and railroad representative as to the route and other information they have available. He will contact the dining car steward for information on meal hours. It is a good idea to have checkers for each diner so you can verify the steward count as to the number of meals served. The average time for a sitting in a standard dining car is 30 minutes.

The chaplain or special services officer should have made arrangements for magazines, books, writing material, cards, and other games, especially if the troops are to be aboard for a long trip. If possible, money from the recreation fund for purchase of post cards, stamps, and daily papers will do much to maintain high morale. Another morale booster is an officer to brief the men on

points of interest; the average Marine is an avid sightseer and he has usually not seen too much of the United States.

On long trips, plans should be made with the railroad representative or conductor to have the men unload at long service stops for exercise. They will recommend the stations where men can be unloaded with the greatest ease. A minimum of once a day should be planned on a long trip. Reports from all car commanders should be made to the train commander after any long stops.

A plan for unloading upon arrival at your destination is a must; make sure the car commanders are thoroughly briefed on it. After the train has been unloaded, inspect the train with the conductor or railroad representative and have the car commanders obtain their signed releases regarding the condition of the car. You will find railroad personnel most cooperative and helpful on any train movement. With proper planning and execution, a movement by rail can be a pleasant experience, but it can cause all kinds of trouble if it is not properly carried out.

A few suggestions for a train commander:

1. Submit car and baggage requirements to G-4 or Supply Officer as soon as practicable.
2. Assign car commanders and personnel to cars by roster. (Make it flexible as cars will often vary as to capacity).
3. Draw tickets and transportation requests. Make sure you have the proper forms.
4. Load baggage prior to arrival of passenger cars when practicable.
5. Inspect cars with railroad representative and car commanders prior to embarking troops. Have car commanders and railroad conductor sign inspection slips.
6. Be assured all personnel are aboard prior to giving conductor permission to leave.
7. Make early contact with dining car steward for meal hours.
8. Make arrangements for exercise stops.
9. Send dispatch to headquarters of place of destination at least five hours before your ETA.
10. Have an unloading plan.
11. Inspect train with railroad representative and car commanders. Complete car inspection slips.
12. Keep an open mind as changes will be the rule rather than the exception.

USMC

Passing in Review

BOOKS OF INTEREST TO MARINE READERS

Marines and Their Specialty . . .

THE U. S. MARINES AND AMPHIBIOUS WAR.—
Jeter A. Isely and Philip Crowl. 636 pages. Indexed and illustrated. Princeton: Princeton University Press.

In the eyes of the American people whom they serve, the history of the United States Marines is reflected essentially as a procession of noteworthy deeds by individuals and small groups. While this is not inaccurate as a characterization of Marines, insofar as their part in history is concerned, there is another—albeit less colorful—aspect of their accomplishments which would appear in the long analysis to deserve an even more prominent place in American historical annals. This is the effort of the Marine Corps, conducted over the past four decades, to rationalize the amphibious operation in terms of modern arms and modern operational concepts. The study of the Marines' activity in this sphere is an area of historical research hitherto largely untouched, and it is to this subject that Messrs Isley, Crowl and their Princeton associates have addressed themselves in composing *The United States Marines and Amphibious War*.

The Princeton volume is a scholarly presentation of the beginnings of Marine Corps—and indeed American—thought on the subject of modern landing operations on a hostile and strongly defended shore. It develops the thesis that, in the post-World War I period when military thought in our country was largely bemused with the lessons of the ponderous war of position just ended, there was a body of sturdy souls who, in the face of budgetary parsimony and professional apathy by the other services, nevertheless applied themselves with singular vigor to the then largely abstract matters of amphibious tactics, techniques, equipment, and even strategy. That a Marine officer should, in 1921, have forecast the chapter and verse of our step-by-step march across the Pacific some 20 years later, even to estimating accurately the forces required to seize Eniwetok Atoll, is emphasized by the authors as less remarkable than logical, in consideration of the studied application of the Marines to the field of amphibious research.

Bringing their subject through the years of preparation immediately preceding the second World War and assessing the developmental efforts of the Marines, the authors conclude that, despite its continuing efforts, the Corps was by no means ready for the total challenge of

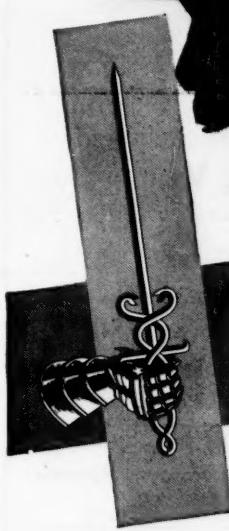
the amphibious war to come. They contend, however, that the doctrines and techniques derived from the years of painstaking effort by the Marines had the effect of placing our nation, and our allies as well, in a position of strength which was not fully apparent until the final event which took place on the quarterdeck of the Missouri some four and one half years later.

Following this absorbing prelude, the volume proceeds logically to develop the tactical application of the research efforts previously described, discussing in succession all of the operations of the Pacific War in which Marines participated. It does so in a manner which is at once technically acceptable to the military reader and understandable to the layman. This portion of the presentation, of course, is quite unlike the preceding part of the book, in that it examines material that has already been related with accuracy and in detail by other historians. In this particular it does not extend greatly the record as it already exists, although the presentation is both full and lucid. This fraction of the book is noteworthy principally for the dignity and candor with which it treats those topics that have come to be described as "controversial." The temporary abandonment of the 1st Marine Division by its naval support at Guadalcanal in mid-August 1942, the conflict of views regarding Central Pacific versus Southwest Pacific strategy, and the long standing divergences concerning landing force tactics at Saipan and Okinawa, are all related and analyzed with an objectivity that inspires both confidence and belief. On this account, the study will be welcomed by all who have, for one reason or another, sincerely sought the facts in these matters.

The position of the authors themselves as recognized historians, as well as the thoroughgoing manner in which the history was prepared, both contribute materially to the stature of the book. Operating as they were, completely without restraint, the authors appear to have succeeded in maintaining an approach which is without either passion or bias. As such, the undertaking bespeaks character in all of its aspects. Because of this, and because of its original development of the genesis of the modern amphibious doctrine, the final product emerges as more than just another book-of-battles, but proves in fact to be truly responsive to its title.

Reviewed by LtGen Lemuel C. Shepherd, Jr.

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BETTER LATE THAN NEVER



But better never late, goes the old saying. It is easy to put things off, to wait till the last minute before doing the most trivial detail. Most people operate on the "first things first" theory and it remains that there are a lot of second things that never get done. To get down to brass tacks, have you ordered your copy of the 1950 bound volume of the Marine Corps GAZETTE? We know that there are a lot of GAZETTE readers who have given this some thought and it is only reasonable to assume that, despite the flood of orders we have received, many people have not taken the trouble to order their bound volume *yet*. Fortunately, it still isn't too late. We purposely increased our order over last year because we believed that the interest in a bound volume containing the much-publicized and well-received November Anniversary issue would be greater than in a normal bound volume.

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**THE
U.S. MARINES
AND
AMPHIBIOUS
WAR**

ISELY AND CROWL

PRINCETON

**THE U.S. MARINES
and AMPHIBIOUS WAR**

Its Theory and Its Practice in the Pacific

BY JETER A. ISELY

PHILIP A. CROWL

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This book, written by two keenly analytical military historians, tells not only what happened in the amphibious campaign across the Pacific, but why it happened the way it did. It presents a new understanding of the basic theory of amphibious war by showing how it developed and was modified as a result of combat experience. It is critical; the mistakes are analyzed as well as the successes. Correspondents and combatants have written eyewitness reports of battles, but no other book has so successfully portrayed the Pacific war as conducted by the generals and admirals. If you want a real understanding of the grand design of an amphibious assault, as well as detailed accounts of actual landings, this book provides the answers.

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